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ABSTRACT

The data presented in these tables are based on the 1975 NSF survey of professional and technical personnel in the sciences and engineering employed at institutions of higher education. In Part 1 of this document, 58 tables are organized under four categories: employment of scientists and engineers, graduate students employed as scientists and engineers, technicians employed in the sciences and engineering, and summary data from survey questionnaires. In Part 2 of this document, the survey questionnaire, survey instructions and definitions are reproduced. (DT)

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# Notes

- The data presented in these tabulations are based on the 1975 NSF survey of professional and technical personnel in the sciences and engineering employed at institutions of higher education. An analytical report of the findings will be published at a later date.

- Of 2,230 institutions included in the 1975 survey, the number of respondents was 1,818 or 82 percent; NSF provided estimates for the remaining 412 nonrespondents. Among the 293 doctorate-granting institutions, which account for more than two-thirds of total employment of academic scientists and engineers, the response rate was 95 percent. The high response rate for the larger institutions accounted for relatively low rates of estimation for most of the aggregated figures. The rate of estimation for total scientists and engineers in 1975, for example, comprised only 9 percent of the universe total. Note that rates of imputation refer only to the portion of the total estimated by NSF and, therefore, do not take into account estimates by the institutions.

- Requests for additional information concerning the survey results should be addressed to Robert J. Loycano, Division of Science Resources Studies, Washington, D.C. 20550.

# Appendix B

## Part 1

## Statistical Tables

NOTE: Tables B-1, B-11, B-19, B-21, B-23, B-32, B-34, B-36, and B-38 combine full-time and part-time scientists and engineers.

### EMPLOYMENT OF SCIENTISTS AND ENGINEERS

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Table B-1. Number of scientists and engineers employed in universities and colleges, by field of employment, January 1965-75

| Field of Employment | January | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1965 | 1967 | 1969 | 1971 | 1973 | 1974 | 1975 |
| Total | 178,904 | 212,855 | 246,183 | 273,775 | 281,516 | 286,098 | 297,193 |
| Engineers | 21,681 | 25,253 | 25,387 | 27,130 | 27,530 | 27,148 | 27,662 |
| Aeronautical | 1,127 | 1,360 | 1,357 | 1,469 | 1,480 | 1,191 | 1,099 |
| Chemical | 1,571 | 1,565 | 1,735 | 1,843 | 1,761 | 1,724 | 1,842 |
| Civil | 3,145 | 3,660 | 3,894 | 4,129 | 4,487 | 4,545 | 4,798 |
| Electrical | 5,478 | 6,563 | 6,803 | 6,885 | 6,941 | 6,475 | 6,701 |
| Mechanical | 4,108 | 4,638 | 4,812 | 5,387 | 5,188 | 4,959 | 5,258 |
| Other Engineers | 6,252 | 7,467 | 6,786 | 7,417 | 7,673 | 8,254 | 7,964 |
| Physical scientists | 25,485 | 31,354 | 33,698 | 35,943 | 37,154 | 38,165 | 38,781 |
| Chemists | 10,684 | 12,961 | 14,201 | 14,688 | 15,289 | 16,069 | 16,253 |
| Earth scientists 1/ | 4,005 | 5,111 | 5,549 | 6,500 | 6,935 | 7,569 | 7,817 |
| Physicists | 9,132 | 11,127 | 11,766 | 12,195 | 12,185 | 12,138 | 12,311 |
| Other physical scientists | 1,664 | 2,155 | 2,182 | 2,560 | 2,745 | 2,389 | 2,400 |
| Mathematicians | 13,680 | 17,776 | 22,495 | 24,548 | 24,772 | 27,108 | 28,445 |
| Life scientists | 75,775 | 87,347 | 97,206 | 110,274 | 112,670 | 112,268 | 115,924 |
| Agricultural | 13,507 | 14,950 | 15,150 | 18,039 | 15,278 | 14,269 | 14,969 |
| Biological | 24,281 | 27,419 | 29,257 | 31,808 | 33,632 | 35,730 | 38,020 |
| Medical | 37,987 | 44,978 | 52,799 | 60,427 | 63,760 | 62,269 | 62,935 |
| Psychologists | 9,430 | 11,358 | 14,780 | 16,806 | 18,881 | 19,966 | 21,727 |
| Social scientists | 32,853 | 39,767 | 52,617 | 59,074 | 60,509 | 61,443 | 64,654 |
| Economists | 7,932 | 9,662 | 10,402 | 11,263 | 11,378 | 12,041 | 12,713 |
| Sociologists | 6,261 | 7,548 | 9,451 | 11,323 | 12,485 | 13,011 | 14,203 |
| Political scientists | 5,919 | 7,190 | 7,919 | 8,938 | 9,705 | 10,010 | 10,605 |
| Historians | (NA) | (NA) | 14,427 | 15,871 | 16,289 | 15,896 | 15,758 |
| Other social scientists | 12,741 | 15,367 | 10,418 | 11,679 | 10,652 | 10,485 | 11,375 |

1/ Includes data for atmospheric scientists and oceanographers.
SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-2. Number of scientists and engineers employed in universities and colleges, by field and employment status, January 1965-75

| Field and employment status | January | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1965 | 1967 | 1969 | 1971 | 1973 | 1974 | 1975 |
| Total | 178,904 | 212,855 | 246,183 | 273,775 | 281,516 | 286,098 | 297,193 |
| Full time | 142,713 | 170,557 | 199,630 | 223,055 | 230,810 | 233,270 | 239,212 |
| Part time | 36,191 | 42,298 | 46,553 | 50,720 | 50,706 | 52,828 | 57,981 |
| Engineers | 21,681 | 25,253 | 25,387 | 27,130 | 27,530 | 27,148 | 27,662 |
| Full time | 18,117 | 20,983 | 21,431 | 23,039 | 23,485 | 22,765 | 22,478 |
| Part time | 3,554 | 4,270 | 3,956 | 4,091 | 4,045 | 4,383 | 5,184 |
| Physical scientists | 25,485 | 31,354 | 33,698 | 35,943 | 37,154 | 38,165 | 38,781 |
| Full time | 22,826 | 27,655 | 29,975 | 32,098 | 32,765 | 33,362 | 33,615 |
| Part time | 2,659 | 3,699 | 3,723 | 3,845 | 4,389 | 4,803 | 5,166 |
| Mathematicians | 13,680 | 17,776 | 22,495 | 24,548 | 24,772 | 27,108 | 28,445 |
| Full time | 10,998 | 14,397 | 18,390 | 20,282 | 20,796 | 22,168 | 22,524 |
| Part time | 2,682 | 3,379 | 4,105 | 4,266 | 3,976 | 4,940 | 5,921 |
| Life scientists | 75,775 | 87,347 | 97,206 | 110,274 | 112,670 | 112,268 | 115,924 |
| Full time | 57,135 | 66,620 | 74,882 | 85,907 | 88,734 | 89,559 | 92,419 |
| Part time | 18,640 | 20,727 | 22,324 | 24,367 | 23,936 | 22,709 | 23,505 |
| Psychologists | 9,430 | 11,358 | 14,780 | 16,806 | 18,881 | 19,966 | 21,727 |
| Full time | 6,929 | 8,554 | 11,536 | 12,994 | 14,781 | 14,960 | 16,125 |
| Part time | 2,501 | 2,804 | 3,244 | 3,812 | 4,100 | 5,006 | 5,602 |
| Social scientists | 32,853 | 39,767 | 52,617 | 59,074 | 60,509 | 61,443 | 64,654 |
| Full time | 26,708 | 32,348 | 43,416 | 48,735 | 50,249 | 50,456 | 52,051 |
| Part time | 6,145 | 7,419 | 9,201 | 10,339 | 10,260 | 10,987 | 12,603 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-3. Number of scientists and engineers employed in universities and colleges, by type of institution and employment status, January 1965-75

| Type of institution and employment status | 1965 | 1967 | 1969 | 1971 | 1973 | 1974 | 1975 |
|---|---|---|---|---|---|---|---|
| Total | 178,904 | 212,855 | 246,183 | 273,775 | 281,516 | 286,098 | 297,193 |
| Full time | 142,713 | 170,557 | 199,630 | 223,055 | 230,810 | 233,270 | 239,212 |
| Part time | 36,191 | 42,298 | 46,553 | 50,720 | 50,706 | 52,828 | 57,981 |
| Doctorate in science and engineering | 118,233 | 142,676 | 159,007 | 176,372 | 180,298 | 182,288 | 188,484 |
| Full time | 94,570 | 114,446 | 128,672 | 144,946 | 148,619 | 150,471 | 154,922 |
| Part time | 23,663 | 28,230 | 30,335 | 31,426 | 31,679 | 31,817 | 33,562 |
| Master's in science and engineering | 21,078 | 24,729 | 33,21[illegible] | 33,897 | 32,160 | 33,084 | 37,510 |
| Full time | 17,434 | 20,748 | 28,595 | 28,991 | 27,976 | 27,964 | 30,675 |
| Part time | 3,644 | 3,981 | 4,616 | 4,906 | 4,184 | 5,120 | 6,835 |
| Bachelor's in science and engineering | 22,423 | 23,025 | 24,808 | 26,665 | 32,298 | 32,929 | 30,923 |
| Full time | 18,673 | 19,328 | 20,731 | 22,732 | 27,051 | 27,275 | 25,[illegible]84 |
| Part time | 3,750 | 3,697 | 4,077 | 3,933 | 5,247 | 5,654 | [illegible],139 |
| No science degree 1/ | 17,170 | 22,425 | 29,157 | 36,841 | 36,760 | 37,797 | 40,276 |
| Full time | 12,036 | 16,035 | 21,632 | 26,386 | 27,164 | 27,560 | 27,831 |
| Part time | 5,134 | 6,390 | 7,525 | 10,455 | 9,596 | 10,237 | 12,445 |

1/ Includes two-year institutions as well as institutions awarding degrees in non-science fields.
SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-4. Full-time scientists and engineers employed in universities and colleges, by major field of employment and control, 1969-74

| Major field of employment and control | January | | | | Average annual percent change 1969-73 | Percent change 1973-74 | Percent change 1974-75 |
|---|---|---|---|---|---|---|---|
| | 1969 | 1973 | 1974 | 1975 | | | |
| Total | 199,630 | 230,810 | 233,270 | 239,212 | 3.7 | 1.1 | 2.5 |
| Public | 127,623 | 156,059 | 160,680 | 167,704 | 5.2 | 3.0 | 4.4 |
| Private | 72,007 | 74,751 | 72,590 | 71,508 | 0.9 | - 2.9 | - 1.5 |
| Engineers | 21,431 | 23,685 | 22,765 | 22,478 | 2.3 | - 3.1 | - 1.3 |
| Public | 14,182 | 16,436 | 16,413 | 16,424 | 3.8 | - 0.1 | 0.1 |
| Private | 7,249 | 7,049 | 6,352 | 6,054 | - 0.7 | - 9.9 | - 4.7 |
| Physical Scientists | 29,975 | 32,765 | 33,162 | 33,615 | 2.2 | 1.8 | 0.8 |
| Public | 18,571 | 21,649 | 22,587 | 22,934 | 3.9 | 4.3 | 1.5 |
| Private | 11,404 | 11,116 | 10,775 | 10,681 | - 0.6 | - 3.1 | - 0.9 |
| Mathematicians | 18,390 | 20,796 | 22,168 | 22,524 | 3.1 | 6.6 | 1.6 |
| Public | 12,236 | 14,830 | 16,201 | 16,681 | 4.9 | 9.2 | 3.0 |
| Private | 6,154 | 5,966 | 5,967 | 5,843 | - 0.8 | 0.2 | - 2.1 |
| Life Scientists | 74,882 | 88,734 | 89,559 | 92,619 | 4.3 | 0.9 | 3.2 |
| Public | 47,484 | 58,763 | 60,248 | 63,792 | 5.5 | 2.5 | 5.9 |
| Private | 27,398 | 29,971 | 29,311 | 28,827 | 2.3 | - 2.2 | - 2.3 |
| Psychologists | 11,536 | 14,781 | 14,960 | 16,125 | 6.4 | 1.2 | 7.8 |
| Public | 7,473 | 10,127 | 10,317 | 11,394 | 7.9 | 1.9 | 10.4 |
| Private | 4,063 | 4,654 | 4,643 | 4,731 | 3.5 | - 0.2 | 1.9 |
| Social Scientists | 43,416 | 50,249 | 50,456 | 52,051 | 3.7 | 0.4 | 3.2 |
| Public | 27,677 | 34,254 | 34,914 | 36,479 | 5.5 | 1.9 | 4.5 |
| Private | 15,739 | 15,995 | 15,542 | 15,572 | 0.4 | - 2.8 | 0.2 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-5. Full-time scientists and engineers employed in universities and colleges, by control and level of attainment, 1969-75

| Control and level of attainment | January | | | | Average annual percent change | Percent change | Percent change |
|---|---|---|---|---|---|---|---|
| | 1969 | 1973 | 1974 | 1975 | 1969-73 | 1973-74 | 1974-75 |
| Total | 199,630 | 230,810 | 233,270 | 239,212 | 3.7 | 1.1 | 2.5 |
| Ph.D., Sc. D. | 94,681 | 121,146 | 126,788 | 131,890 | 6.4 | 4.7 | 4.0 |
| M.D., D.D.S., etc. | 28,574 | 31,625 | 29,690 | 29,604 | 2.6 | -6.1 | -0.3 |
| Master's | 57,156 | 58,612 | 58,883 | 59,576 | 0.6 | 0.5 | 1.2 |
| Bachelor's | 19,219 | 19,427 | 17,909 | 18,142 | 0.3 | -7.8 | 1.3 |
| Public | 127,023 | 156,059 | 160,680 | 167,704 | 5.2 | 3.0 | 4.4 |
| Ph.D., Sc. D. | 59,729 | 80,819 | 85,836 | 90,283 | 7.9 | 6.2 | 5.2 |
| M.D., D.D.S., etc. | 14,210 | 16,360 | 15,685 | 15,761 | 3.6 | -4.1 | 0.5 |
| Master's | 40,093 | 44,124 | 45,435 | 47,106 | 2.4 | 3.0 | 3.7 |
| Bachelor's | 13,591 | 14,756 | 13,724 | 14,554 | 2.1 | -7.0 | 6.0 |
| Private | 72,007 | 74,751 | 72,590 | 71,508 | 0.9 | -2.9 | -1.5 |
| Ph.D., Sc. D. | 34,952 | 40,327 | 40,952 | 41,607 | 3.6 | 1.5 | 1.6 |
| M.D., D.D.S., etc. | 14,364 | 15,265 | 14,005 | 13,843 | 1.5 | -8.3 | -1.2 |
| Master's | 17,063 | 14,488 | 13,448 | 12,470 | -4.0 | -7.2 | -7.3 |
| Bachelor's | 5,628 | 4,671 | 4,185 | 3,588 | -4.6 | -10.4 | -14.3 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-6. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN INSTITUTIONS AWARDING DOCTORATE DEGREES IN THE SCIENCES OR ENGINEERING, BY FIELD OF EMPLOYMENT, CONTROL, AND EMPLOYMENT STATUS: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | PRIVATE | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL-TIME | PART-TIME | TOTAL | FULL-TIME | PART-TIME |
| TOTAL | 126,056 | 108,070 | 17,986 | 62,428 | 46,852 | 15,576 |
| ENGINEERS (TOTAL) | 13,482 | 11,838 | 1,644 | 6,046 | 4,773 | 1,273 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 536 | 480 | 56 | 358 | 315 | 43 |
| (2) CHEMICAL ENGINEERS | 1,044 | 916 | 128 | 543 | 473 | 70 |
| (3) CIVIL ENGINEERS | 2,379 | 2,098 | 281 | 881 | 619 | 262 |
| (4) ELECTRICAL ENGINEERS | 2,535 | 2,262 | 273 | 1,702 | 1,306 | 396 |
| (5) MECHANICAL ENGINEERS | 2,300 | 2,069 | 231 | 1,006 | 829 | 177 |
| (6) OTHER ENGINEERS | 4,688 | 4,013 | 675 | 1,556 | 1,231 | 325 |
| PHYSICAL SCIENTISTS (TOTAL) | 11,031 | 9,773 | 1,258 | 5,767 | 5,167 | 600 |
| (1) CHEMISTS | 5,421 | 4,694 | 727 | 2,795 | 2,469 | 326 |
| (2) PHYSICISTS | 4,544 | 4,140 | 404 | 2,591 | 2,371 | 220 |
| (3) OTHER PHYSICAL SCIENTISTS | 1,066 | 939 | 127 | 381 | 327 | 54 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 3,752 | 3,375 | 377 | 1,163 | 1,008 | 155 |
| (1) EARTH SCIENTISTS | 2,569 | 2,317 | 252 | 792 | 681 | 111 |
| (2) ATMOSPHERIC SCIENTISTS | 420 | 364 | 56 | 125 | 99 | 26 |
| (3) OCEANOGRAPHERS | 763 | 674 | 89 | 246 | 228 | 18 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 8,205 | 7,277 | 928 | 3,422 | 2,609 | 813 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 6,429 | 5,755 | 674 | 2,529 | 2,070 | 519 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 1,776 | 1,522 | 254 | 833 | 539 | 294 |
| LIFE SCIENTISTS (TOTAL) | 63,337 | 52,772 | 10,565 | 34,433 | 24,764 | 9,669 |
| (1) AGRICULTURAL SCIENTISTS | 12,979 | 12,256 | 723 | 345 | 324 | 21 |
| (2) BIOLOGICAL SCIENTISTS | 17,391 | 14,779 | 1,612 | 8,840 | 7,759 | 1,081 |
| (3) MEDICAL SCIENTISTS | 33,667 | 25,737 | 7,930 | 25,248 | 16,681 | 8,567 |
| PSYCHOLOGISTS (TOTAL) | 6,169 | 5,151 | 1,018 | 3,138 | 2,069 | 1,069 |
| SOCIAL SCIENTISTS (TOTAL) | 20,380 | 17,884 | 2,496 | 8,459 | 6,462 | 1,997 |
| (1) ECONOMISTS | 4,711 | 4,253 | 458 | 1,861 | 1,429 | 432 |
| (2) SOCIOLOGISTS | 3,980 | 3,368 | 612 | 1,684 | 1,251 | 433 |
| (3) POLITICAL SCIENTISTS | 3,181 | 2,847 | 334 | 1,641 | 1,227 | 414 |
| (4) HISTORIANS | 3,689 | 3,349 | 340 | 1,709 | 1,419 | 290 |
| (5) OTHER SOCIAL SCIENTISTS | 4,823 | 4,067 | 756 | 1,564 | 1,136 | 428 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-7. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN INSTITUTIONS AWARDING MASTER'S DEGREES IN THE SCIENCES OR ENGINEERING, BY FIELD OF EMPLOYMENT, CONTROL, AND EMPLOYMENT STATUS: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | PRIVATE | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL-TIME | PART-TIME | TOTAL | FULL-TIME | PART-TIME |
| TOTAL | 29,731 | 25,008 | 4,723 | 7,779 | 5,667 | 2,112 |
| ENGINEERS (TOTAL) | 1,55[illegible] | 1,230 | 326 | 631 | 448 | 183 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 42 | 31 | 11 | 18 | 4 | 14 |
| (2) CHEMICAL ENGINEERS | 71 | 62 | 9 | 32 | 27 | 5 |
| (3) CIVIL ENGINEERS | 364 | 274 | 90 | 86 | 64 | 22 |
| (4) ELECTRICAL ENGINEERS | 377 | 300 | 77 | 193 | 156 | 37 |
| (5) MECHANICAL ENGINEERS | 331 | 266 | 65 | 186 | 140 | 46 |
| (6) OTHER ENGINEERS | 371 | 297 | 74 | 116 | 57 | 59 |
| PHYSICAL SCIENTISTS (TOTAL) | 3,709 | 3,188 | 521 | 1,060 | 869 | 191 |
| (1) CHEMISTS | 2,047 | 1,775 | 272 | 598 | 502 | 96 |
| (2) PHYSICISTS | 1,446 | 1,265 | 201 | 394 | 324 | 70 |
| (3) OTHER PHYSICAL SCIENTISTS | 216 | 168 | 48 | 68 | 43 | 25 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 1,147 | 1,010 | 137 | 144 | 113 | 31 |
| (1) EARTH SCIENTISTS | 1,031 | 916 | 115 | 133 | 107 | 26 |
| (2) ATMOSPHERIC SCIENTISTS | 56 | 47 | 9 | 4 | 2 | 2 |
| (3) OCEANOGRAPHERS | 60 | 47 | 13 | 7 | 4 | 3 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 4,175 | 3,508 | 667 | 913 | 688 | 225 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 3,628 | 3,077 | 551 | 761 | 586 | 175 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 547 | 431 | 116 | 152 | 102 | 50 |
| LIFE SCIENTISTS (TOTAL) | 4,741 | 3,987 | 754 | 914 | 745 | 169 |
| (1) AGRICULTURAL SCIENTISTS | 634 | 563 | 71 | 13 | 8 | 5 |
| (2) BIOLOGICAL SCIENTISTS | 3,528 | 3,011 | 517 | 755 | 652 | 103 |
| (3) MEDICAL SCIENTISTS | 579 | 413 | 166 | 146 | 85 | 61 |
| PSYCHOLOGISTS (TOTAL) | 3,889 | 3,092 | 797 | 1,062 | 650 | 412 |
| SOCIAL SCIENTISTS (TOTAL) | 10,514 | 8,993 | 1,521 | 3,055 | 2,154 | 901 |
| (1) ECONOMISTS | 1,737 | 1,368 | 369 | 672 | 417 | 255 |
| (2) SOCIOLOGISTS | 2,410 | 1,992 | 418 | 656 | 444 | 212 |
| (3) POLITICAL SCIENTISTS | 1,778 | 1,531 | 247 | 521 | 379 | 142 |
| (4) HISTORIANS | 2,903 | 2,679 | 224 | 766 | 632 | 134 |
| (5) OTHER SOCIAL SCIENTISTS | 1,686 | 1,403 | 283 | 440 | 282 | 158 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-8. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN INSTITUTIONS AWARDING BACHELOR'S DEGREES IN THE SCIENCES OR ENGINEERING, BY FIELD OF EMPLOYMENT, CONTROL, AND EMPLOYMENT STATUS: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | PRIVATE | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL-TIME | PART-TIME | TOTAL | FULL-TIME | PART-TIME |
| TOTAL | 10,504 | 9,416 | 1,088 | 20,419 | 16,368 | 4,051 |
| ENGINEERS (TOTAL) | 782 | 722 | 60 | 794 | 635 | 159 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 38 | 38 | 0 | 25 | 25 | 0 |
| (2) CHEMICAL ENGINEERS | 121 | 121 | 0 | 27 | 26 | 1 |
| (3) CIVIL ENGINEERS | 121 | 105 | 16 | 98 | 78 | 20 |
| (4) ELECTRICAL ENGINEERS | 181 | 175 | 6 | 277 | 237 | 40 |
| (5) MECHANICAL ENGINEERS | 201 | 183 | 18 | 203 | 172 | 31 |
| (6) OTHER ENGINEERS | 229 | 209 | 20 | 164 | 97 | 67 |
| PHYSICAL SCIENTISTS (TOTAL) | 1,420 | 1,337 | 83 | 3,256 | 2,838 | 418 |
| (1) CHEMISTS | 778 | 721 | 57 | 2,001 | 1,744 | 257 |
| (2) PHYSICISTS | 518 | 498 | 20 | 1,178 | 1,038 | 140 |
| (3) OTHER PHYSICAL SCIENTISTS | 124 | 118 | 6 | 77 | 56 | 21 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 382 | 342 | 40 | 375 | 294 | 81 |
| (1) EARTH SCIENTISTS | 325 | 289 | 36 | 355 | 282 | 73 |
| (2) ATMOSPHERIC SCIENTISTS | 21 | 20 | 1 | 10 | 3 | 7 |
| (3) OCEANOGRAPHERS | 36 | 33 | 3 | 10 | 9 | 1 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 1,562 | 1,392 | 170 | 2,602 | 2,155 | 447 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 1,351 | 1,206 | 145 | 2,280 | 1,923 | 357 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 211 | 186 | 25 | 322 | 232 | 90 |
| LIFE SCIENTISTS (TOTAL) | 1,571 | 1,405 | 166 | 3,373 | 2,610 | 763 |
| (1) AGRICULTURAL SCIENTISTS | 135 | 133 | 2 | 50 | 46 | 4 |
| (2) BIOLOGICAL SCIENTISTS | 1,141 | 1,049 | 92 | 2,684 | 2,325 | 359 |
| (3) MEDICAL SCIENTISTS | 295 | 223 | 72 | 639 | 239 | 400 |
| PSYCHOLOGISTS (TOTAL) | 1,001 | 840 | 161 | 2,317 | 1,740 | 577 |
| SOCIAL SCIENTISTS (TOTAL) | 3,786 | 3,378 | 408 | 7,702 | 6,096 | 1,606 |
| (1) ECONOMISTS | 654 | 562 | 92 | 1,541 | 1,180 | 361 |
| (2) SOCIOLOGISTS | 911 | 774 | 137 | 1,889 | 1,392 | 497 |
| (3) POLITICAL SCIENTISTS | 616 | 560 | 56 | 1,318 | 1,096 | 222 |
| (4) HISTORIANS | 1,141 | 1,071 | 70 | 2,347 | 2,028 | 319 |
| (5) OTHER SOCIAL SCIENTISTS | 464 | 411 | 53 | 607 | 400 | 207 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-9. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN INSTITUTIONS AWARDING DEGREES IN FIELDS OTHER THAN THE SCIENCES OR ENGINEERING, BY FIELD OF EMPLOYMENT, CONTROL, AND EMPLOYMENT STATUS: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | PRIVATE | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL-TIME | PART-TIME | TOTAL | FULL-TIME | PART-TIME |
| TOTAL | 498 | 193 | 305 | 1,007 | 758 | 249 |
| ENGINEERS (TOTAL) | 3 | 0 | 3 | 13 | 8 | 5 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 0 | 0 | 0 | 0 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 0 | 0 | 0 | 0 | 0 | 0 |
| (3) CIVIL ENGINEERS | 1 | 0 | 1 | 0 | 0 | 0 |
| (4) ELECTRICAL ENGINEERS | 1 | 0 | 1 | 7 | 5 | 2 |
| (5) MECHANICAL ENGINEERS | 1 | 0 | 1 | 2 | 2 | 0 |
| (6) OTHER ENGINEERS | 0 | 0 | 0 | 4 | 1 | 3 |
| PHYSICAL SCIENTISTS (TOTAL) | 63 | 39 | 24 | 82 | 72 | 10 |
| (1) CHEMISTS | 31 | 23 | 8 | 43 | 42 | 1 |
| (2) PHYSICISTS | 19 | 16 | 3 | 33 | 27 | 6 |
| (3) OTHER PHYSICAL SCIENTISTS | 13 | 0 | 13 | 6 | 3 | 3 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 24 | 6 | 18 | 30 | 29 | 1 |
| (1) EARTH SCIENTISTS | 22 | 6 | 16 | 30 | 29 | 1 |
| (2) ATMOSPHERIC SCIENTISTS | 1 | 0 | 1 | 0 | 0 | 0 |
| (3) OCEANOGRAPHERS | 1 | 0 | 1 | 0 | 0 | 0 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 61 | 26 | 35 | 138 | 109 | 29 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 55 | 26 | 29 | 128 | 104 | 24 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 6 | 0 | 6 | 10 | 5 | 5 |
| LIFE SCIENTISTS (TOTAL) | 111 | 32 | 79 | 259 | 138 | 121 |
| (1) AGRICULTURAL SCIENTISTS | 0 | 0 | 0 | 1 | 1 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 41 | 24 | 17 | 131 | 88 | 43 |
| (3) MEDICAL SCIENTISTS | 70 | 8 | 62 | 127 | 49 | 78 |
| PSYCHOLOGISTS (TOTAL) | 80 | 44 | 36 | 119 | 96 | 23 |
| SOCIAL SCIENTISTS (TOTAL) | 156 | 46 | 110 | 366 | 306 | 60 |
| (1) ECONOMISTS | 15 | 2 | 13 | 90 | 74 | 16 |
| (2) SOCIOLOGISTS | 25 | 9 | 16 | 74 | 59 | 15 |
| (3) POLITICAL SCIENTISTS | 18 | 7 | 11 | 58 | 48 | 10 |
| (4) HISTORIANS | 42 | 18 | 24 | 118 | 105 | 13 |
| (5) OTHER SOCIAL SCIENTISTS | 56 | 10 | 46 | 26 | 20 | 6 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-10. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN TWO-YEAR INSTITUTIONS, BY FIELD OF EMPLOYMENT, CONTROL, AND EMPLOYMENT STATUS: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | PRIVATE | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL-TIME | PART-TIME | TOTAL | FULL-TIME | PART-TIME |
| TOTAL | 36,346 | 25,017 | 11,329 | 2,425 | 1,863 | 562 |
| ENGINEERS (TOTAL) | 4,157 | 2,634 | 1,523 | 198 | 190 | 8 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 78 | 50 | 28 | 41 | 41 | 0 |
| (2) CHEMICAL ENGINEERS | 104 | 65 | 39 | 9 | 9 | 0 |
| (3) CIVIL ENGINEERS | 827 | 516 | 311 | 41 | 40 | 1 |
| (4) ELECTRICAL ENGINEERS | 1,347 | 846 | 501 | 81 | 80 | 1 |
| (5) MECHANICAL ENGINEERS | 993 | 635 | 358 | 35 | 32 | 3 |
| (6) OTHER ENGINEERS | 808 | 522 | 286 | 28 | 25 | 3 |
| PHYSICAL SCIENTISTS (TOTAL) | 4,223 | 3,282 | 941 | 353 | 268 | 85 |
| (1) CHEMISTS | 2,339 | 1,834 | 505 | 200 | 139 | 61 |
| (2) PHYSICISTS | 1,458 | 1,184 | 274 | 130 | 110 | 20 |
| (3) OTHER PHYSICAL SCIENTISTS | 426 | 264 | 162 | 23 | 19 | 4 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 768 | 582 | 186 | 32 | 23 | 9 |
| (1) EARTH SCIENTISTS | 665 | 500 | 165 | 30 | 21 | 9 |
| (2) ATMOSPHERIC SCIENTISTS | 38 | 27 | 11 | 2 | 2 | 0 |
| (3) OCEANOGRAPHERS | 65 | 55 | 10 | 0 | 0 | 0 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 6,995 | 4,478 | 2,517 | 372 | 282 | 90 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 5,737 | 3,743 | 1,994 | 345 | 257 | 88 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 1,258 | 735 | 523 | 27 | 25 | 2 |
| LIFE SCIENTISTS (TOTAL) | 7,002 | 5,596 | 1,406 | 483 | 370 | 113 |
| (1) AGRICULTURAL SCIENTISTS | 799 | 628 | 171 | 13 | 11 | 2 |
| (2) BIOLOGICAL SCIENTISTS | 4,171 | 3,331 | 840 | 338 | 273 | 65 |
| (3) MEDICAL SCIENTISTS | 2,032 | 1,637 | 395 | 132 | 86 | 46 |
| PSYCHOLOGISTS (TOTAL) | 3,704 | 2,267 | 1,437 | 248 | 176 | 72 |
| SOCIAL SCIENTISTS (TOTAL) | 9,497 | 6,178 | 3,319 | 739 | 554 | 185 |
| (1) ECONOMISTS | 1,317 | 851 | 466 | 115 | 74 | 41 |
| (2) SOCIOLOGISTS | 2,379 | 1,347 | 1,032 | 195 | 141 | 54 |
| (3) POLITICAL SCIENTISTS | 1,380 | 973 | 407 | 94 | 73 | 21 |
| (4) HISTORIANS | 2,795 | 2,066 | 729 | 252 | 205 | 47 |
| (5) OTHER SOCIAL SCIENTISTS | 1,626 | 941 | 685 | 83 | 61 | 22 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-11. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT AND FUNCTION: JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | FUNCTION | | |
|---|---|---|---|---|
| | | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES |
| TOTAL | 297,193 | 231,774 | 49,605 | 15,814 |
| ENGINEERS (TOTAL) | 27,662 | 21,919 | 4,810 | 933 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 1,099 | 803 | 284 | 12 |
| (2) CHEMICAL ENGINEERS | 1,842 | 1,459 | 326 | 57 |
| (3) CIVIL ENGINEERS | 4,798 | 4,156 | 521 | 121 |
| (4) ELECTRICAL ENGINEERS | 6,701 | 5,477 | 1,054 | 170 |
| (5) MECHANICAL ENGINEERS | 5,258 | 4,508 | 629 | 121 |
| (6) OTHER ENGINEERS | 7,964 | 5,516 | 1,996 | 452 |
| PHYSICAL SCIENTISTS (TOTAL) | 30,964 | 24,197 | 6,256 | 511 |
| (1) CHEMISTS | 16,253 | 13,068 | 2,893 | 292 |
| (2) PHYSICISTS | 12,311 | 9,718 | 2,432 | 161 |
| (3) OTHER PHYSICAL SCIENTISTS | 2,400 | 1,411 | 931 | 58 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 7,817 | 5,780 | 1,879 | 158 |
| (1) EARTH SCIENTISTS | 5,972 | 4,926 | 928 | 116 |
| (2) ATMOSPHERIC SCIENTISTS | 677 | 389 | 266 | 22 |
| (3) OCEANOGRAPHERS | 1,168 | 463 | 685 | 20 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 28,445 | 26,054 | 1,537 | 854 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 23,303 | 22,254 | 806 | 243 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 5,142 | 3,800 | 731 | 611 |
| LIFE SCIENTISTS (TOTAL) | 115,924 | 75,448 | 29,863 | 10,613 |
| (1) AGRICULTURAL SCIENTISTS | 14,969 | 4,461 | 4,297 | 6,211 |
| (2) BIOLOGICAL SCIENTISTS | 38,020 | 26,603 | 10,508 | 909 |
| (3) MEDICAL SCIENTISTS | 62,935 | 44,384 | 15,058 | 3,293 |
| PSYCHOLOGISTS (TOTAL) | 21,727 | 18,824 | 1,456 | 1,447 |
| SOCIAL SCIENTISTS (TOTAL) | 64,654 | 59,352 | 3,804 | 1,498 |
| (1) ECONOMISTS | 12,713 | 10,994 | 1,236 | 483 |
| (2) SOCIOLOGISTS | 14,203 | 13,249 | 708 | 246 |
| (3) POLITICAL SCIENTISTS | 10,605 | 9,929 | 484 | 192 |
| (4) HISTORIANS | 15,758 | 15,310 | 272 | 176 |
| (5) OTHER SOCIAL SCIENTISTS | 11,375 | 9,870 | 1,104 | 401 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-12. NUMBER OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT AND FUNCTION: JANUARY 1974-75

| FIELD OF EMPLOYMENT | TOTAL | | FUNCTION | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | TEACHING | | RESEARCH & DEVELOPMENT | | OTHER ACTIVITIES | |
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| TOTAL | 239,212 | 233,270 | 181,524 | 177,457 | 43,199 | 41,410 | 14,489 | 14,403 |
| ENGINEERS (TOTAL) | 22,478 | 22,765 | 17,543 | 17,650 | 4,047 | 4,168 | 888 | 947 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 947 | 1,023 | 691 | 711 | 246 | 301 | 10 | 11 |
| (2) CHEMICAL ENGINEERS | 1,590 | 1,522 | 1,268 | 1,216 | 267 | 263 | 55 | 43 |
| (3) CIVIL ENGINEERS | 3,794 | 3,760 | 3,243 | 3,196 | 434 | 434 | 117 | 130 |
| (4) ELECTRICAL ENGINEERS | 5,367 | 5,404 | 4,295 | 4,293 | 910 | 942 | 162 | 169 |
| (5) MECHANICAL ENGINEERS | 4,328 | 4,255 | 3,681 | 3,609 | 530 | 509 | 117 | 137 |
| (6) OTHER ENGINEERS | 6,452 | 6,801 | 4,365 | 4,625 | 1,660 | 1,719 | 427 | 457 |
| PHYSICAL SCIENTISTS (TOTAL) | 26,833 | 26,857 | 20,860 | 20,762 | 5,507 | 5,629 | 466 | 466 |
| (1) CHEMIST | 13,963 | 14,080 | 11,208 | 11,195 | 2,472 | 2,613 | 263 | 272 |
| (2) PHYSICISTS | 10,953 | 10,873 | 8,589 | 8,459 | 2,215 | 2,266 | 149 | 148 |
| (3) OTHER PHYSICAL SCIENTISTS | 1,937 | 1,904 | 1,063 | 1,108 | 820 | 750 | 54 | 46 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 6,782 | 6,505 | 4,988 | 4,724 | 1,649 | 1,642 | 145 | 139 |
| (1) EARTH SCIENTISTS | 5,168 | 4,958 | 4,254 | 4,029 | 805 | 836 | 109 | 93 |
| (2) ATMOSPHERIC SCIENTISTS | 564 | 571 | 323 | 302 | 222 | 253 | 19 | 16 |
| (3) OCEANOGRAPHERS | 1,050 | 976 | 411 | 393 | 622 | 553 | 17 | 30 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 22,524 | 22,168 | 20,406 | 20,043 | 1,368 | 1,325 | 750 | 800 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 18,747 | 18,498 | 17,806 | 17,599 | 719 | 698 | 222 | 201 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 3,777 | 3,670 | 2,600 | 2,444 | 649 | 627 | 528 | 599 |
| LIFE SCIENTISTS (TOTAL) | 92,419 | 89,559 | 56,388 | 55,087 | 26,347 | 24,471 | 9,684 | 10,001 |
| (1) AGRICULTURAL SCIENTISTS | 13,970 | 13,431 | 3,873 | 3,630 | 3,989 | 4,067 | 6,108 | 5,734 |
| (2) BIOLOGICAL SCIENTISTS | 33,291 | 31,546 | 23,000 | 22,138 | 9,470 | 8,571 | 821 | 837 |
| (3) MEDICAL SCIENTISTS | 45,158 | 44,582 | 29,515 | 29,319 | 12,888 | 11,833 | 2,755 | 3,430 |
| PSYCHOLOGISTS (TOTAL) | 16,125 | 14,960 | 13,783 | 13,024 | 1,131 | 1,105 | 1,211 | 831 |
| SOCIAL SCIENTISTS (TOTAL) | 52,051 | 50,456 | 47,556 | 46,167 | 3,150 | 3,070 | 1,345 | 1,219 |
| (1) ECONOMISTS | 10,230 | 9,831 | 8,688 | 8,425 | 1,104 | 1,019 | 438 | 387 |
| (2) SOCIOLOGISTS | 10,777 | 10,052 | 9,975 | 9,379 | 588 | 491 | 214 | 182 |
| (3) POLITICAL SCIENTISTS | 8,741 | 8,402 | 8,207 | 7,855 | 372 | 403 | 162 | 144 |
| (4) HISTORIANS | 13,572 | 13,791 | 13,182 | 13,288 | 236 | 368 | 154 | 135 |
| (5) OTHER SOCIAL SCIENTISTS | 8,731 | 8,380 | 7,504 | 7,220 | 850 | 789 | 377 | 371 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-13. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT, CONTROL, AND EMPLOYMENT STATUS: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | PRIVATE | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL-TIME | PART-TIME | TOTAL | FULL-TIME | PART-TIME |
| TOTAL | 203,135 | 167,704 | 35,431 | 94,058 | 71,508 | 22,550 |
| ENGINEERS (TOTAL) | 19,980 | 16,424 | 3,556 | 7,682 | 6,054 | 1,628 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 694 | 599 | 95 | 405 | 348 | 57 |
| (2) CHEMICAL ENGINEERS | 1,231 | 1,055 | 176 | 611 | 535 | 76 |
| (3) CIVIL ENGINEERS | 3,692 | 2,993 | 699 | 1,106 | 801 | 305 |
| (4) ELECTRICAL ENGINEERS | 4,441 | 3,583 | 858 | 2,260 | 1,784 | 476 |
| (5) MECHANICAL ENGINEERS | 3,826 | 3,153 | 673 | 1,432 | 1,175 | 257 |
| (6) OTHER ENGINEERS | 6,096 | 5,041 | 1,055 | 1,868 | 1,411 | 457 |
| PHYSICAL SCIENTISTS (TOTAL) | 20,446 | 17,619 | 2,827 | 10,518 | 9,214 | 1,304 |
| (1) CHEMISTS | 10,616 | 9,047 | 1,569 | 5,637 | 4,896 | 741 |
| (2) PHYSICISTS | 7,985 | 7,083 | 902 | 4,326 | 3,870 | 456 |
| (3) OTHER PHYSICAL SCIENTISTS | 1,845 | 1,489 | 356 | 555 | 448 | 107 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 6,073 | 5,315 | 758 | 1,744 | 1,467 | 277 |
| (1) EARTH SCIENTISTS | 4,632 | 4,048 | 584 | 1,340 | 1,120 | 220 |
| (2) ATMOSPHERIC SCIENTISTS | 536 | 458 | 78 | 141 | 106 | 35 |
| (3) OCEANOGRAPHERS | 905 | 809 | 96 | 263 | 241 | 22 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 20,998 | 16,681 | 4,317 | 7,447 | 5,843 | 1,604 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 17,200 | 13,807 | 3,393 | 6,103 | 4,940 | 1,163 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 3,798 | 2,874 | 924 | 1,344 | 903 | 441 |
| LIFE SCIENTISTS (TOTAL) | 76,462 | 63,792 | 12,670 | 39,462 | 28,627 | 10,835 |
| (1) AGRICULTURAL SCIENTISTS | 14,547 | 13,580 | 967 | 422 | 390 | 32 |
| (2) BIOLOGICAL SCIENTISTS | 25,272 | 22,194 | 3,078 | 12,748 | 11,097 | 1,651 |
| (3) MEDICAL SCIENTISTS | 36,643 | 28,018 | 8,625 | 26,292 | 17,140 | 9,152 |
| PSYCHOLOGISTS (TOTAL) | 14,843 | 11,394 | 3,449 | 6,884 | 4,731 | 2,153 |
| SOCIAL SCIENTISTS (TOTAL) | 44,333 | 36,479 | 7,854 | 20,321 | 15,572 | 4,749 |
| (1) ECONOMISTS | 8,434 | 7,056 | 1,378 | 4,279 | 3,174 | 1,105 |
| (2) SOCIOLOGISTS | 9,705 | 7,490 | 2,215 | 4,498 | 3,287 | 1,211 |
| (3) POLITICAL SCIENTISTS | 6,973 | 5,918 | 1,055 | 3,632 | 2,823 | 809 |
| (4) HISTORIANS | 10,566 | 9,183 | 1,383 | 5,192 | 4,389 | 803 |
| (5) OTHER SOCIAL SCIENTISTS | 8,655 | 6,832 | 1,823 | 2,720 | 1,899 | 821 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-14. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY TYPE OF INSTITUTION, EMPLOYMENT STATUS, CONTROL, AND FUNCTION: JANUARY 1975

| TYPE OF INSTITUTION AND EMPLOYMENT STATUS | PUBLIC | | | | PRIVATE | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES |
| ALL INSTITUTIONS | | | | | | | | |
| TOTAL | 203,135 | 159,405 | 30,786 | 12,944 | 94,058 | 72,369 | 18,819 | 2,870 |
| FULL-TIME | 167,704 | 129,230 | 26,358 | 12,116 | 71,508 | 52,294 | 16,841 | 2,373 |
| PART-TIME | 35,431 | 30,175 | 4,428 | 828 | 22,550 | 20,075 | 1,978 | 497 |
| INSTITUTIONS GRANTING: | | | | | | | | |
| DOCTORATE IN S&E | | | | | | | | |
| TOTAL | 126,056 | 84,526 | 29,962 | 11,568 | 62,428 | 41,693 | 18,496 | 2,239 |
| FULL-TIME | 108,070 | 71,657 | 25,596 | 10,817 | 46,852 | 28,401 | 16,585 | 1,866 |
| PART-TIME | 17,986 | 12,869 | 4,366 | 751 | 15,576 | 13,292 | 1,911 | 373 |
| MASTER'S IN S&E | | | | | | | | |
| TOTAL | 29,731 | 28,592 | 586 | 553 | 7,779 | 7,540 | 62 | 177 |
| FULL-TIME | 25,008 | 23,952 | 541 | 515 | 5,667 | 5,476 | 40 | 151 |
| PART-TIME | 4,723 | 4,640 | 45 | 38 | 2,112 | 2,064 | 22 | 26 |
| BACHELOR'S IN S&E | | | | | | | | |
| TOTAL | 10,504 | 10,143 | 177 | 184 | 20,419 | 19,812 | 225 | 382 |
| FULL-TIME | 9,416 | 9,080 | 164 | 172 | 16,368 | 15,899 | 181 | 288 |
| PART-TIME | 1,088 | 1,063 | 13 | 12 | 4,051 | 3,913 | 44 | 94 |
| OTHER THAN SCIENCE | | | | | | | | |
| TOTAL | 498 | 496 | 0 | 2 | 1,007 | 985 | 2 | 20 |
| FULL-TIME | 193 | 191 | 0 | 2 | 758 | 736 | 2 | 20 |
| PART-TIME | 305 | 305 | 0 | 0 | 249 | 249 | 0 | 0 |
| TWO-YEAR INSTITUTIONS | | | | | | | | |
| TOTAL | 36,346 | 35,648 | 61 | 637 | 2,425 | 2,339 | 34 | 52 |
| FULL-TIME | 25,017 | 24,350 | 57 | 610 | 1,863 | 1,782 | 33 | 48 |
| PART-TIME | 11,329 | 11,298 | 4 | 27 | 562 | 557 | 1 | 4 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-15. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY TYPE OF INSTITUTION, EMPLOYMENT STATUS, AND FUNCTION: JANUARY 1974–75

| TYPE OF INSTITUTION AND EMPLOYMENT STATUS | TOTAL | | FUNCTION | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | TEACHING | | RESEARCH & DEVELOPMENT | | OTHER ACTIVITIES | |
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| ALL INSTITUTIONS | | | | | | | | |
| TOTAL | 297,193 | 286,998 | 231,774 | 222,834 | 49,635 | 47,714 | 15,814 | 15,550 |
| FULL-TIME | 239,212 | 231,270 | 181,524 | 177,457 | 43,199 | 41,410 | 14,489 | 14,403 |
| PART-TIME | 57,981 | 52,828 | 50,250 | 45,377 | 6,436 | 6,304 | 1,325 | 1,147 |
| INSTITUTIONS GRANTING: | | | | | | | | |
| DOCTORATE IN S&E | | | | | | | | |
| TOTAL | 188,484 | 182,288 | 126,219 | 122,197 | 48,458 | 46,184 | 13,827 | 13,907 |
| FULL-TIME | 154,922 | 150,471 | 100,058 | 97,575 | 42,101 | 40,015 | 12,683 | 12,881 |
| PART-TIME | 33,562 | 31,817 | 26,161 | 24,622 | 6,277 | 6,169 | 1,124 | 1,026 |
| MASTER'S IN S&E | | | | | | | | |
| TOTAL | 37,510 | 33,084 | 36,132 | 31,441 | 668 | 946 | 730 | 697 |
| FULL-TIME | 30,675 | 27,964 | 29,428 | 26,450 | 581 | 874 | 666 | 640 |
| PART-TIME | 6,835 | 5,120 | 6,704 | 4,991 | 87 | 72 | 64 | 57 |
| BACHELOR'S IN S&E | | | | | | | | |
| TOTAL | 30,923 | 32,929 | 29,955 | 32,042 | 402 | 477 | 566 | 410 |
| FULL-TIME | 25,784 | 27,275 | 24,979 | 26,494 | 345 | 420 | 460 | 361 |
| PART-TIME | 5,139 | 5,654 | 4,976 | 5,548 | 57 | 57 | 106 | 49 |
| OTHER THAN SCIENCE | | | | | | | | |
| TOTAL | 1,505 | 1,472 | 1,481 | 1,454 | 21 | 131 | 221 | 5 |
| FULL-TIME | 951 | 963 | 927 | 947 | 21 | 111 | 221 | 5 |
| PART-TIME | 554 | 509 | 554 | 507 | 0 | 21 | 0 | 0 |
| TWO-YEAR INSTITUTIONS | | | | | | | | |
| TOTAL | 38,771 | 36,325 | 37,987 | 35,780 | 95 | 94 | 689 | 531 |
| FULL-TIME | 26,880 | 26,597 | 26,132 | 25,991 | 90 | 90 | 658 | 516 |
| PART-TIME | 11,891 | 9,728 | 11,855 | 9,789 | 5 | 4 | 31 | 15 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-16. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY TYPE OF INSTITUTION, EMPLOYMENT STATUS, AND MAJOR FIELD OF EMPLOYMENT: JANUARY 1975

| TYPE OF INSTITUTION AND EMPLOYMENT STATUS | ALL FIELDS | ENGINEERS | PHYSICAL SCIENTISTS | ENVIRONMENTAL SCIENTISTS | MATHEMATICAL SCIENTISTS | LIFE SCIENTISTS | PSYCHOLOGISTS | SOCIAL SCIENTISTS |
|---|---|---|---|---|---|---|---|---|
| ALL INSTITUTIONS | | | | | | | | |
| TOTAL | 297,193 | 27,662 | 30,964 | 7,817 | 28,445 | 115,924 | 21,727 | 64,654 |
| FULL-TIME | 239,212 | 22,478 | 26,833 | 6,782 | 22,524 | 92,419 | 16,125 | 52,051 |
| PART-TIME | 57,981 | 5,184 | 4,131 | 1,035 | 5,921 | 23,505 | 5,602 | 12,603 |
| INSTITUTIONS GRANTING: | | | | | | | | |
| DOCTORATE IN S&E | | | | | | | | |
| TOTAL | 188,484 | 19,528 | 16,798 | 4,915 | 11,627 | 97,470 | 9,307 | 28,839 |
| FULL-TIME | 154,922 | 16,611 | 14,940 | 4,383 | 9,886 | 77,536 | 7,220 | 24,346 |
| PART-TIME | 33,562 | 2,917 | 1,858 | 532 | 1,741 | 19,934 | 2,087 | 4,493 |
| MASTER'S IN S&E | | | | | | | | |
| TOTAL | 37,510 | 2,187 | 4,769 | 1,291 | 5,088 | 5,655 | 4,951 | 13,569 |
| FULL-TIME | 30,675 | 1,678 | 4,057 | 1,123 | 4,196 | 4,732 | 3,742 | 11,147 |
| PART-TIME | 6,835 | 509 | 712 | 168 | 892 | 923 | 1,209 | 2,422 |
| BACHELOR'S IN S&E | | | | | | | | |
| TOTAL | 30,923 | 1,576 | 4,676 | 757 | 4,164 | 4,944 | 3,318 | 11,488 |
| FULL-TIME | 25,784 | 1,357 | 4,175 | 636 | 3,547 | 4,015 | 2,580 | 9,474 |
| PART-TIME | 5,139 | 219 | 501 | 121 | 617 | 929 | 738 | 2,014 |
| OTHER THAN SCIENCE | | | | | | | | |
| TOTAL | 1,505 | 16 | 145 | 54 | 199 | 378 | 199 | 522 |
| FULL-TIME | 951 | 8 | 111 | 35 | 135 | 178 | 140 | 352 |
| PART-TIME | 554 | 8 | 34 | 19 | 64 | 200 | 59 | 170 |
| TWO-YEAR INSTITUTIONS | | | | | | | | |
| TOTAL | 38,771 | 4,355 | 4,576 | 800 | 7,367 | 7,485 | 3,952 | 10,236 |
| FULL-TIME | 26,880 | 2,824 | 3,550 | 605 | 4,760 | 5,966 | 2,443 | 6,732 |
| PART-TIME | 11,891 | 1,531 | 1,026 | 195 | 2,607 | 1,519 | 1,509 | 3,504 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-17. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY TYPE OF INSTITUTION, EMPLOYMENT STATUS, AND LEVEL OF EDUCATIONAL ATTAINMENT: JANUARY 1974-75

| TYPE OF INSTITUTION AND EMPLOYMENT STATUS | TOTAL | | LEVEL OF ATTAINMENT | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | PH. D. OR SC. D. | | M.D., D.D.S. ETC. | | MASTER'S | | BACHELOR'S | |
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| ALL INSTITUTIONS | | | | | | | | | | |
| TOTAL | 297,193 | 286,098 | 146,341 | 139,955 | 44,896 | 44,761 | 80,545 | 77,083 | 25,411 | 24,299 |
| FULL-TIME | 239,212 | 233,270 | 131,890 | 126,788 | 29,604 | 29,690 | 59,576 | 58,883 | 18,142 | 17,909 |
| PART-TIME | 57,981 | 52,828 | 14,451 | 13,167 | 15,292 | 15,071 | 20,969 | 18,200 | 7,269 | 6,390 |
| INSTITUTIONS GRANTING: | | | | | | | | | | |
| DOCTORATE IN S&E | | | | | | | | | | |
| TOTAL | 188,484 | 182,288 | 100,624 | 96,551 | 43,263 | 42,340 | 27,949 | 27,253 | 16,348 | 16,144 |
| FULL-TIME | 154,922 | 150,471 | 91,413 | 87,905 | 28,827 | 28,350 | 21,270 | 21,138 | 13,412 | 13,078 |
| PART-TIME | 33,562 | 31,817 | 9,211 | 8,646 | 14,536 | 13,990 | 6,679 | 6,115 | 2,936 | 3,066 |
| MASTER'S IN S&E | | | | | | | | | | |
| TOTAL | 37,510 | 33,084 | 22,378 | 21,013 | 267 | 448 | 12,015 | 10,067 | 1,850 | 1,556 |
| FULL-TIME | 30,675 | 27,964 | 21,130 | 19,770 | 176 | 340 | 8,665 | 7,586 | 704 | 768 |
| PART-TIME | 6,835 | 5,120 | 2,248 | 1,243 | 91 | 108 | 3,350 | 2,481 | 1,146 | 788 |
| BACHELOR'S IN S&E | | | | | | | | | | |
| TOTAL | 30,923 | 32,929 | 16,968 | 17,335 | 685 | 1,400 | 11,805 | 12,777 | 1,465 | 1,417 |
| FULL-TIME | 25,784 | 27,275 | 15,480 | 15,819 | 269 | 661 | 9,078 | 9,949 | 951 | 846 |
| PART-TIME | 5,139 | 5,654 | 1,482 | 1,516 | 416 | 739 | 2,727 | 2,828 | 514 | 571 |
| OTHER THAN SCIENCE | | | | | | | | | | |
| TOTAL | 1,505 | 1,472 | 747 | 612 | 98 | 121 | 594 | 669 | 66 | 90 |
| FULL-TIME | 951 | 963 | 487 | 403 | 19 | 41 | 412 | 466 | 33 | 53 |
| PART-TIME | 554 | 509 | 260 | 209 | 79 | 80 | 182 | 183 | 33 | 37 |
| TWO-YEAR INSTITUTIONS | | | | | | | | | | |
| TOTAL | 38,771 | 36,325 | 4,624 | 4,444 | 483 | 452 | 28,182 | 26,337 | 5,482 | 5,092 |
| FULL-TIME | 26,880 | 26,597 | 3,374 | 3,391 | 313 | 298 | 20,151 | 19,744 | 3,042 | 3,164 |
| PART-TIME | 11,891 | 9,728 | 1,250 | 1,053 | 170 | 154 | 8,031 | 6,593 | 2,440 | 1,928 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-18. FTE SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY TYPE OF INSTITUTION, EMPLOYMENT STATUS, AND FUNCTION: JANUARY 1975

| TYPE OF INSTITUTION AND EMPLOYMENT STATUS | TOTAL NUMBER | FULL-TIME EQUIVALENT | | | |
|---|---|---|---|---|---|
| | | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES |
| ALL INSTITUTIONS | | | | | |
| TOTAL | 297,193 | 260,806 | 190,956 | 52,562 | 17,288 |
| FULL-TIME | 239,212 | 239,212 | 173,454 | 49,094 | 16,664 |
| PART-TIME | 57,981 | 21,594 | 17,502 | 3,468 | 624 |
| INSTITUTIONS GRANTING: | | | | | |
| DOCTORATE IN S&E | | | | | |
| TOTAL | 188,484 | 167,923 | 101,688 | 50,931 | 15,304 |
| FULL-TIME | 154,922 | 154,922 | 92,658 | 47,519 | 14,745 |
| PART-TIME | 33,562 | 13,001 | 9,030 | 3,412 | 559 |
| MASTER'S IN S&E | | | | | |
| TOTAL | 37,510 | 33,374 | 31,588 | 1,025 | 761 |
| FULL-TIME | 30,675 | 30,675 | 28,936 | 996 | 743 |
| PART-TIME | 6,835 | 2,699 | 2,652 | 29 | 18 |
| BACHELOR'S IN S&E | | | | | |
| TOTAL | 30,923 | 27,593 | 26,587 | 492 | 514 |
| FULL-TIME | 25,784 | 25,784 | 24,834 | 469 | 481 |
| PART-TIME | 5,139 | 1,809 | 1,753 | 23 | 33 |
| OTHER THAN SCIENCE | | | | | |
| TOTAL | 1,505 | 1,096 | 1,069 | 7 | 20 |
| FULL-TIME | 951 | 951 | 924 | 7 | 20 |
| PART-TIME | 554 | 145 | 145 | 0 | 0 |
| TWO-YEAR INSTITUTIONS | | | | | |
| TOTAL | 38,771 | 30,820 | 30,024 | 107 | 689 |
| FULL-TIME | 26,880 | 26,880 | 26,102 | 103 | 675 |
| PART-TIME | 11,891 | 3,940 | 3,922 | 4 | 14 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-19. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT, CONTROL, AND FUNCTION: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | | PRIVATE | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES |
| TOTAL | 203,135 | 159,405 | 30,786 | 12,944 | 94,058 | 72,369 | 18,819 | 2,870 |
| ENGINEERS (TOTAL) | 19,980 | 16,378 | 2,878 | 724 | 7,682 | 5,941 | 1,932 | 209 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 694 | 598 | 84 | 12 | 405 | 205 | 200 | 0 |
| (2) CHEMICAL ENGINEERS | 1,231 | 1,011 | 178 | 42 | 611 | 448 | 148 | 15 |
| (3) CIVIL ENGINEERS | 3,692 | 3,200 | 390 | 102 | 1,136 | 956 | 131 | 19 |
| (4) ELECTRICAL ENGINEERS | 4,441 | 3,855 | 480 | 106 | 2,260 | 1,622 | 574 | 64 |
| (5) MECHANICAL ENGINEERS | 3,826 | 3,375 | 360 | 91 | 1,432 | 1,133 | 269 | 30 |
| (6) OTHER ENGINEERS | 6,096 | 4,339 | 1,386 | 371 | 1,868 | 1,177 | 610 | 81 |
| PHYSICAL SCIENTISTS (TOTAL) | 20,446 | 16,403 | 3,667 | 376 | 10,514 | 7,794 | 2,589 | 135 |
| (1) CHEMISTS | 10,616 | 8,784 | 1,623 | 209 | 5,637 | 4,284 | 1,271 | 83 |
| (2) PHYSICISTS | 7,985 | 6,526 | 1,333 | 126 | 4,526 | 3,192 | 1,099 | 35 |
| (3) OTHER PHYSICAL SCIENTISTS | 1,845 | 1,093 | 711 | 41 | 555 | 318 | 220 | 17 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 6,073 | 4,590 | 1,353 | 130 | 1,744 | 1,190 | 526 | 28 |
| (1) EARTH SCIENTISTS | 4,632 | 3,841 | 652 | 99 | 1,340 | 1,047 | 276 | 17 |
| (2) ATMOSPHERIC SCIENTISTS | 536 | 317 | 203 | 16 | 141 | 72 | 63 | 6 |
| (3) OCEANOGRAPHERS | 905 | 392 | 498 | 15 | 263 | 71 | 187 | 5 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 20,998 | 19,436 | 929 | 633 | 7,447 | 6,818 | 608 | 221 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 17,200 | 16,561 | 445 | 194 | 6,103 | 5,693 | 361 | 49 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 3,798 | 2,875 | 484 | 459 | 1,344 | 925 | 247 | 172 |
| LIFE SCIENTISTS (TOTAL) | 76,462 | 49,451 | 18,177 | 8,834 | 39,462 | 26,197 | 11,686 | 1,579 |
| (1) AGRICULTURAL SCIENTISTS | 14,547 | 4,219 | 4,192 | 6,136 | 422 | 242 | 105 | 75 |
| (2) BIOLOGICAL SCIENTISTS | 25,272 | 18,350 | 6,205 | 717 | 12,748 | 8,253 | 4,303 | 192 |
| (3) MEDICAL SCIENTISTS | 36,643 | 26,882 | 7,780 | 1,981 | 26,292 | 17,702 | 7,278 | 1,312 |
| PSYCHOLOGISTS (TOTAL) | 14,843 | 12,806 | 958 | 1,079 | 6,884 | 6,018 | 498 | 368 |
| SOCIAL SCIENTISTS (TOTAL) | 44,333 | 40,341 | 2,824 | 1,168 | 20,321 | 19,011 | 980 | 330 |
| (1) ECONOMISTS | 8,434 | 6,982 | 1,053 | 399 | 4,279 | 4,012 | 183 | 84 |
| (2) SOCIOLOGISTS | 9,705 | 9,061 | 472 | 172 | 4,498 | 4,188 | 236 | 74 |
| (3) POLITICAL SCIENTISTS | 6,973 | 6,509 | 328 | 136 | 3,632 | 3,420 | 156 | 56 |
| (4) HISTORIANS | 10,566 | 10,253 | 191 | 122 | 5,192 | 5,057 | 81 | 54 |
| (5) OTHER SOCIAL SCIENTISTS | 8,655 | 7,536 | 780 | 339 | 2,720 | 2,334 | 324 | 62 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-20. NUMBER OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT, CONTROL, AND FUNCTION: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | | PRIVATE | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES |
| TOTAL | 167,704 | 129,230 | 26,358 | 12,116 | 71,508 | 52,294 | 16,841 | 2,373 |
| ENGINEERS (TOTAL) | 16,424 | 13,359 | 2,362 | 703 | 6,054 | 4,184 | 1,685 | 185 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 599 | 519 | 70 | 10 | 348 | 172 | 176 | 0 |
| (2) CHEMICAL ENGINEERS | 1,055 | 876 | 138 | 41 | 535 | 392 | 129 | 14 |
| (3) CIVIL ENGINEERS | 2,993 | 2,571 | 322 | 100 | 801 | 672 | 112 | 17 |
| (4) ELECTRICAL ENGINEERS | 3,582 | 3,068 | 414 | 101 | 1,784 | 1,227 | 496 | 61 |
| (5) MECHANICAL ENGINEERS | 3,153 | 2,777 | 288 | 88 | 1,175 | 904 | 242 | 29 |
| (6) OTHER ENGINEERS | 5,041 | 3,548 | 1,130 | 363 | 1,411 | 817 | 530 | 64 |
| PHYSICAL SCIENTISTS (TOTAL) | 17,619 | 14,166 | 3,105 | 348 | 9,214 | 6,694 | 2,402 | 118 |
| (1) CHEMISTS | 9,047 | 7,550 | 1,308 | 189 | 4,896 | 3,658 | 1,164 | 74 |
| (2) PHYSICISTS | 7,083 | 5,787 | 1,177 | 119 | 3,870 | 2,802 | 1,038 | 30 |
| (3) OTHER PHYSICAL SCIENTISTS | 1,489 | 829 | 620 | 40 | 448 | 234 | 200 | 14 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 5,315 | 4,032 | 1,162 | 121 | 1,467 | 956 | 487 | 24 |
| (1) EARTH SCIENTISTS | 4,048 | 3,401 | 554 | 93 | 1,128 | 853 | 259 | 16 |
| (2) ATMOSPHERIC SCIENTISTS | 458 | 275 | 167 | 16 | 106 | 48 | 55 | 3 |
| (3) OCEANOGRAPHERS | 809 | 356 | 441 | 12 | 241 | 55 | 181 | 5 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 16,681 | 15,247 | 817 | 617 | 5,843 | 5,159 | 551 | 133 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 13,807 | 13,221 | 393 | 193 | 4,940 | 4,585 | 326 | 29 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 2,874 | 2,026 | 424 | 424 | 903 | 574 | 225 | 104 |
| LIFE SCIENTISTS (TOTAL) | 63,792 | 39,662 | 15,838 | 8,292 | 28,627 | 16,726 | 10,509 | 1,392 |
| (1) AGRICULTURAL SCIENTISTS | 13,560 | 3,663 | 3,884 | 6,033 | 390 | 210 | 105 | 75 |
| (2) BIOLOGICAL SCIENTISTS | 22,194 | 16,018 | 5,523 | 653 | 11,097 | 6,982 | 3,967 | 168 |
| (3) MEDICAL SCIENTISTS | 28,018 | 19,981 | 6,431 | 1,606 | 17,140 | 9,534 | 6,457 | 1,149 |
| PSYCHOLOGISTS (TOTAL) | 11,394 | 9,737 | 723 | 934 | 4,731 | 4,046 | 408 | 277 |
| SOCIAL SCIENTISTS (TOTAL) | 36,479 | 33,027 | 2,351 | 1,101 | 15,572 | 14,529 | 799 | 244 |
| (1) ECONOMISTS | 7,056 | 5,716 | 949 | 391 | 3,174 | 2,972 | 155 | 47 |
| (2) SOCIOLOGISTS | 7,490 | 6,945 | 391 | 154 | 3,287 | 3,030 | 197 | 60 |
| (3) POLITICAL SCIENTISTS | 5,918 | 5,543 | 252 | 123 | 2,823 | 2,664 | 120 | 39 |
| (4) HISTORIANS | 9,183 | 8,903 | 167 | 113 | 4,389 | 4,279 | 69 | 41 |
| (5) OTHER SOCIAL SCIENTISTS | 6,832 | 5,920 | 592 | 320 | 1,899 | 1,584 | 258 | 57 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-21. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT AND TYPE OF INSTITUTION: JANUARY 1974-75

| FIELD OF EMPLOYMENT | ALL INSTITUTIONS | | INSTITUTIONS GRANTING: | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DOCTORATE IN S&E | | MASTER'S IN S&E | | BACHELOR'S IN S&E | | OTHER THAN SCIENCE | | TWO-YEAR INSTITUTIONS | |
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| TOTAL | 297,193 | 286,098 | 184,484 | 182,288 | 37,510 | 33,084 | 30,923 | 32,529 | 1,505 | 1,472 | 38,771 | 36,325 |
| ENGINEERS (TOTAL) | 27,662 | 27,148 | 19,528 | 19,721 | 2,187 | 2,095 | 1,576 | 1,407 | 16 | 24 | 4,355 | 3,901 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 1,099 | 1,191 | 894 | 980 | 60 | 26 | 63 | 71 | 0 | 0 | 82 | 114 |
| (2) CHEMICAL ENGINEERS | 1,842 | 1,724 | 1,587 | 1,477 | 103 | 106 | 39 | 44 | 0 | 0 | 113 | 97 |
| (3) CIVIL ENGINEERS | 4,798 | 4,545 | 3,260 | 3,281 | 453 | 396 | 219 | 175 | 11 | 11 | 868 | 692 |
| (4) ELECTRICAL ENGINEERS | 6,701 | 6,475 | 4,237 | 4,340 | 570 | 515 | 458 | 388 | 8 | 8 | 1,428 | 1,226 |
| (5) MECHANICAL ENGINEERS | 5,258 | 4,959 | 3,306 | 3,196 | 517 | 456 | 454 | 379 | 3 | 9 | 1,028 | 919 |
| (6) OTHER ENGINEERS | 7,964 | 8,254 | 6,244 | 6,447 | 487 | 596 | 393 | 350 | 4 | 8 | 836 | 853 |
| PHYSICAL SCIENTISTS (TOTAL) | 30,964 | 30,596 | 16,798 | 16,962 | 4,769 | 4,286 | 4,676 | 4,829 | 145 | 164 | 4,576 | 4,355 |
| (1) CHEMISTS | 16,253 | 16,069 | 8,216 | 8,410 | 2,645 | 2,376 | 2,779 | 2,837 | 74 | 83 | 2,539 | 2,363 |
| (2) PHYSICISTS | 12,311 | 12,130 | 7,135 | 7,081 | 1,840 | 1,686 | 1,696 | 1,766 | 52 | 54 | 1,588 | 1,551 |
| (3) OTHER PHYSICAL SCIENTISTS | 2,400 | 2,389 | 1,447 | 1,471 | 284 | 224 | 201 | 226 | 19 | 27 | 449 | 441 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 7,817 | 7,569 | 4,915 | 4,708 | 1,291 | 1,200 | 757 | 760 | 54 | 50 | 800 | 851 |
| (1) EARTH SCIENTISTS | 5,972 | 5,756 | 3,381 | 3,270 | 1,164 | 1,059 | 680 | 683 | 52 | 42 | 695 | 702 |
| (2) ATMOSPHERIC SCIENTISTS | 677 | 677 | 545 | 534 | 60 | 55 | 31 | 30 | 1 | 6 | 40 | 52 |
| (3) OCEANOGRAPHERS | 1,168 | 1,136 | 989 | 904 | 67 | 86 | 46 | 47 | 1 | 2 | 65 | 97 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 28,445 | 27,108 | 11,627 | 11,322 | 5,088 | 4,508 | 4,164 | 4,408 | 199 | 199 | 7,367 | 6,671 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 23,303 | 22,255 | 9,018 | 8,752 | 4,389 | 3,904 | 3,631 | 3,876 | 183 | 179 | 6,082 | 5,544 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 5,142 | 4,853 | 2,609 | 2,570 | 699 | 604 | 533 | 532 | 16 | 20 | 1,285 | 1,127 |
| LIFE SCIENTISTS (TOTAL) | 115,924 | 112,268 | 97,470 | 92,903 | 5,655 | 5,512 | 4,944 | 5,935 | 370 | 336 | 7,485 | 7,582 |
| (1) AGRICULTURAL SCIENTISTS | 14,969 | 14,269 | 13,324 | 12,443 | 647 | 876 | 185 | 235 | 11 | 0 | 812 | 715 |
| (2) BIOLOGICAL SCIENTISTS | 38,020 | 35,730 | 25,231 | 23,388 | 4,283 | 3,798 | 3,825 | 4,005 | 172 | 193 | 4,509 | 4,346 |
| (3) MEDICAL SCIENTISTS | 62,935 | 62,269 | 58,915 | 57,072 | 725 | 838 | 934 | 1,695 | 197 | 143 | 2,164 | 2,521 |
| PSYCHOLOGISTS (TOTAL) | 21,727 | 19,966 | 9,307 | 8,776 | 4,951 | 3,984 | 3,318 | 3,526 | 199 | 208 | 3,952 | 3,472 |
| SOCIAL SCIENTISTS (TOTAL) | 64,654 | 61,443 | 28,839 | 27,896 | 13,569 | 11,499 | 11,488 | 12,064 | 522 | 491 | 10,236 | 9,493 |
| (1) ECONOMISTS | 12,713 | 12,041 | 6,572 | 6,408 | 2,409 | 2,049 | 1,195 | 2,143 | 105 | 93 | 1,432 | 1,348 |
| (2) SOCIOLOGISTS | 14,203 | 13,011 | 5,664 | 5,191 | 3,066 | 2,471 | 2,800 | 2,905 | 99 | 105 | 2,574 | 2,339 |
| (3) POLITICAL SCIENTISTS | 10,605 | 10,010 | 4,822 | 4,587 | 2,299 | 1,949 | 1,934 | 1,959 | 76 | 61 | 1,474 | 1,454 |
| (4) HISTORIANS | 15,758 | 15,896 | 5,394 | 5,651 | 3,669 | 3,319 | 3,488 | 3,742 | 160 | 150 | 3,047 | 3,034 |
| (5) OTHER SOCIAL SCIENTISTS | 11,375 | 10,485 | 6,387 | 6,059 | 2,126 | 1,711 | 1,071 | 1,315 | 82 | 62 | 1,709 | 1,318 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-22. NUMBER OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT AND TYPE OF INSTITUTION: JANUARY 1974-75

| FIELD OF EMPLOYMENT | ALL INSTITUTIONS | | INSTITUTIONS GRANTING: | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DOCTORATE IN S&E | | MASTER'S IN S&E | | BACHELOR'S IN S&E | | OTHER THAN SCIENCE | | TWO-YEAR INSTITUTIONS | |
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| TOTAL | 239,212 | 233,270 | 154,922 | 150,471 | 30,675 | 27,964 | 25,784 | 27,275 | 951 | 963 | 26,880 | 26,597 |
| ENGINEERS (TOTAL) | 22,478 | 22,765 | 16,611 | 17,000 | 1,678 | 1,698 | 1,357 | 1,248 | 81 | 211 | 2,824 | 2,798 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 947 | 1,023 | 795 | 867 | 35 | 13 | 63 | 58 | 0 | 0 | 54 | 85 |
| (2) CHEMICAL ENGINEERS | 1,590 | 1,522 | 1,389 | 1,323 | 89 | 91 | 38 | 37 | 0 | 0 | 74 | 71 |
| (3) CIVIL ENGINEERS | 3,794 | 3,760 | 2,717 | 2,796 | 338 | 315 | 183 | 151 | 0 | 0 | 556 | 498 |
| (4) ELECTRICAL ENGINEERS | 5,367 | 5,404 | 3,568 | 3,730 | 456 | 424 | 412 | 343 | 5 | 5 | 926 | 902 |
| (5) MECHANICAL ENGINEERS | 4,328 | 4,255 | 2,898 | 2,832 | 406 | 392 | 355 | 343 | 21 | 81 | 667 | 680 |
| (6) OTHER ENGINEERS | 6,452 | 6,801 | 5,244 | 5,452 | 354 | 463 | 306 | 316 | 11 | 81 | 547 | 562 |
| PHYSICAL SCIENTISTS (TOTAL) | 26,833 | 26,857 | 14,940 | 15,148 | 4,057 | 3,790 | 4,175 | 4,300 | 111 | 128 | 3,550 | 3,491 |
| (1) CHEMISTS | 13,943 | 14,080 | 7,163 | 7,443 | 2,277 | 2,110 | 2,465 | 2,535 | 65 | 70 | 1,973 | 1,922 |
| (2) PHYSICISTS | 10,953 | 10,873 | 6,511 | 6,465 | 1,569 | 1,495 | 1,536 | 1,581 | 43 | 50 | 1,294 | 1,282 |
| (3) OTHER PHYSICAL SCIENTISTS | 1,937 | 1,904 | 1,266 | 1,240 | 211 | 185 | 174 | 184 | 3 | 8 | 283 | 287 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 6,782 | 6,505 | 4,383 | 4,216 | 1,123 | 1,033 | 636 | 646 | 35 | 24 | 605 | 586 |
| (1) EARTH SCIENTISTS | 5,168 | 4,958 | 3,018 | 2,936 | 1,023 | 915 | 571 | 585 | 35 | 19 | 521 | 503 |
| (2) ATMOSPHERIC SCIENTISTS | 564 | 571 | 463 | 467 | 49 | 46 | 23 | 21 | 0 | 5 | 29 | 32 |
| (3) OCEANOGRAPHERS | 1,050 | 976 | 902 | 813 | 51 | 72 | 42 | 40 | 0 | 0 | 55 | 51 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 22,524 | 22,168 | 9,886 | 9,817 | 4,196 | 3,790 | 3,547 | 3,781 | 135 | 149 | 4,760 | 4,631 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 18,747 | 18,498 | 7,825 | 7,733 | 3,663 | 3,330 | 3,129 | 3,366 | 130 | 140 | 4,000 | 3,929 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 3,777 | 3,670 | 2,061 | 2,084 | 533 | 460 | 418 | 415 | 5 | 9 | 760 | 702 |
| LIFE SCIENTISTS (TOTAL) | 92,419 | 89,559 | 77,536 | 73,804 | 4,732 | 4,754 | 4,015 | 4,741 | 170 | 176 | 5,966 | 6,084 |
| (1) AGRICULTURAL SCIENTISTS | 13,970 | 13,431 | 12,560 | 11,853 | 571 | 795 | 179 | 207 | 11 | 0 | 639 | 576 |
| (2) BIOLOGICAL SCIENTISTS | 33,291 | 31,546 | 22,538 | 20,995 | 3,663 | 3,319 | 3,374 | 3,589 | 112 | 130 | 3,604 | 3,513 |
| (3) MEDICAL SCIENTISTS | 45,158 | 44,582 | 42,418 | 40,956 | 498 | 640 | 462 | 945 | 57 | 46 | 1,723 | 1,995 |
| PSYCHOLOGISTS (TOTAL) | 16,125 | 14,960 | 7,220 | 6,752 | 3,742 | 3,092 | 2,580 | 2,670 | 140 | 144 | 2,443 | 2,302 |
| SOCIAL SCIENTISTS (TOTAL) | 52,051 | 50,456 | 24,346 | 23,734 | 11,147 | 9,807 | 9,474 | 9,869 | 352 | 321 | 6,732 | 6,705 |
| (1) ECONOMISTS | 10,230 | 9,831 | 5,682 | 5,480 | 1,809 | 1,684 | 1,742 | 1,717 | 76 | 66 | 925 | 884 |
| (2) SOCIOLOGISTS | 10,777 | 10,052 | 4,619 | 4,274 | 2,436 | 2,032 | 2,166 | 2,191 | 68 | 64 | 1,488 | 1,491 |
| (3) POLITICAL SCIENTISTS | 8,741 | 8,402 | 4,074 | 3,913 | 1,910 | 1,662 | 1,656 | 1,706 | 55 | 46 | 1,046 | 1,075 |
| (4) HISTORIANS | 13,572 | 13,791 | 4,768 | 5,044 | 3,311 | 3,007 | 3,099 | 3,291 | 123 | 112 | 2,271 | 2,337 |
| (5) OTHER SOCIAL SCIENTISTS | 8,731 | 8,380 | 5,203 | 5,023 | 1,685 | 1,422 | 811 | 984 | 30 | 33 | 1,002 | 918 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-21. NUMBER OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FUNCTION, TYPE OF INSTITUTION, AND LEVEL OF EDUCATIONAL ATTAINMENT: JANUARY 1974-75

| FUNCTION AND TYPE OF INSTITUTION | TOTAL | | LEVEL OF ATTAINMENT: PH. D. OR SC. D. | | M.D., D.D.S. ETC. | | MASTER'S | | BACHELOR'S | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| ALL FUNCTIONS, TOTAL | | | | | | | | | | |
| TOTAL | 239,212 | 233,270 | 131,890 | 126,788 | 29,604 | 29,590 | 59,576 | 58,883 | 18,142 | 17,909 |
| DOCTORATE IN S&E | 154,922 | 150,471 | 91,413 | 87,905 | 28,827 | 28,350 | 21,270 | 21,138 | 13,412 | 13,078 |
| MASTER'S IN S&E | 30,675 | 27,964 | 21,130 | 19,270 | 176 | 340 | 8,665 | 7,586 | 704 | 768 |
| BACHELOR'S IN S&E | 25,784 | 27,275 | 15,486 | 15,819 | 269 | 661 | 9,078 | 9,949 | 951 | 846 |
| OTHER DEGREE GRANTING | 951 | 963 | 487 | 403 | 19 | 41 | 412 | 466 | 33 | 53 |
| TWO-YEAR | 26,880 | 26,597 | 3,374 | 3,391 | 313 | 298 | 20,151 | 19,744 | 3,042 | 3,164 |
| TEACHING | | | | | | | | | | |
| TOTAL | 181,524 | 177,457 | 103,781 | 99,900 | 28,312 | 28,105 | 49,979 | 49,682 | 7,452 | 7,770 |
| DOCTORATE IN S&E | 100,058 | 97,575 | 64,614 | 62,388 | 19,572 | 18,924 | 12,767 | 12,924 | 3,105 | 3,339 |
| MASTER'S IN S&E | 29,428 | 26,450 | 20,361 | 18,415 | 159 | 289 | 8,336 | 7,187 | 572 | 559 |
| BACHELOR'S IN S&E | 24,979 | 26,494 | 15,064 | 15,428 | 262 | 560 | 8,821 | 9,752 | 832 | 754 |
| OTHER DEGREE GRANTING | 927 | 947 | 477 | 392 | 19 | 41 | 406 | 462 | 25 | 52 |
| TWO-YEAR | 26,132 | 25,991 | 3,265 | 3,277 | 304 | 291 | 19,649 | 19,357 | 2,918 | 3,066 |
| RESEARCH AND DEVELOPMENT | | | | | | | | | | |
| TOTAL | 43,199 | 41,410 | 23,839 | 22,749 | 7,337 | 7,217 | 5,723 | 5,603 | 6,300 | 5,841 |
| DOCTORATE IN S&E | 42,181 | 40,015 | 23,199 | 21,915 | 7,332 | 7,186 | 5,482 | 5,251 | 6,168 | 5,663 |
| MASTER'S IN S&E | 581 | 874 | 415 | 523 | 3 | 18 | 103 | 214 | 60 | 119 |
| BACHELOR'S IN S&E | 345 | 420 | 204 | 285 | 2 | 13 | 95 | 83 | 44 | 39 |
| OTHER DEGREE GRANTING | 21 | 11 | 21 | 7 | 0 | 0 | 0 | 4 | 0 | 0 |
| TWO-YEAR | 90 | 90 | 19 | 19 | 0 | 0 | 43 | 51 | 28 | 20 |
| OTHER S&E ACTIVITIES | | | | | | | | | | |
| TOTAL | 14,489 | 14,403 | 4,270 | 4,139 | 1,955 | 2,368 | 3,874 | 3,598 | 4,390 | 4,298 |
| DOCTORATE IN S&E | 12,683 | 12,881 | 3,600 | 3,602 | 1,923 | 2,240 | 3,021 | 2,963 | 4,139 | 4,076 |
| MASTER'S IN S&E | 666 | 640 | 354 | 332 | 14 | 33 | 226 | 185 | 72 | 90 |
| BACHELOR'S IN S&E | 460 | 361 | 218 | 106 | 5 | 88 | 142 | 114 | 73 | 53 |
| OTHER DEGREE GRANTING | 22 | 51 | 8 | 41 | 0 | 0 | 6 | 0 | 8 | 1 |
| TWO-YEAR | 658 | 516 | 90 | 95 | 13 | 7 | 459 | 336 | 96 | 78 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-23. NUMBER OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FUNCTION, TYPE OF INSTITUTION, AND LEVEL OF EDUCATIONAL ATTAINMENT: JANUARY 1974-75

| FUNCTION AND TYPE OF INSTITUTION | TOTAL | | LEVEL OF ATTAINMENT: PH. D. OR SC. D. | | M.D., D.D.S. ETC. | | MASTER'S | | BACHELOR'S | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| ALL FUNCTIONS, TOTAL | | | | | | | | | | |
| TOTAL | 297,193 | 286,098 | 146,341 | 139,955 | 44,896 | 44,761 | 80,545 | 77,083 | 25,411 | 24,299 |
| DOCTORATE IN S&E | 188,484 | 182,288 | 100,624 | 96,551 | 43,363 | 42,340 | 27,949 | 27,253 | 16,548 | 16,144 |
| MASTER'S IN S&E | 37,510 | 33,084 | 23,378 | 21,013 | 267 | 448 | 12,015 | 10,067 | 1,850 | 1,556 |
| BACHELOR'S IN S&E | 30,923 | 32,929 | 16,968 | 17,335 | 685 | 1,400 | 11,805 | 12,777 | 1,465 | 1,417 |
| OTHER DEGREE GRANTING | 1,505 | 1,472 | 767 | 612 | 98 | 121 | 594 | 649 | 46 | 90 |
| TWO-YEAR | 38,771 | 36,325 | 4,624 | 4,444 | 483 | 452 | 28,182 | 26,337 | 5,482 | 5,092 |
| TEACHING | | | | | | | | | | |
| TOTAL | 231,774 | 222,834 | 115,297 | 110,542 | 33,828 | 33,177 | 69,385 | 66,350 | 13,264 | 12,765 |
| DOCTORATE IN S&E | 126,219 | 122,197 | 71,013 | 68,599 | 32,354 | 30,941 | 17,990 | 17,591 | 4,862 | 5,066 |
| MASTER'S IN S&E | 36,132 | 31,441 | 27,550 | 20,108 | 244 | 390 | 11,650 | 9,617 | 1,688 | 1,326 |
| BACHELOR'S IN S&E | 29,955 | 32,042 | 16,485 | 16,913 | 662 | 1,280 | 11,506 | 12,556 | 1,302 | 1,293 |
| OTHER DEGREE GRANTING | 1,481 | 1,494 | 737 | 599 | 98 | 121 | 588 | 665 | 58 | 89 |
| TWO-YEAR | 37,987 | 35,700 | 4,512 | 4,323 | 470 | 445 | 27,651 | 25,961 | 5,354 | 4,991 |
| RESEARCH AND DEVELOPMENT | | | | | | | | | | |
| TOTAL | 49,609 | 47,714 | 26,452 | 25,052 | 8,649 | 8,839 | 6,942 | 6,850 | 7,562 | 6,973 |
| DOCTORATE IN S&E | 48,458 | 46,184 | 25,763 | 24,164 | 8,643 | 8,801 | 6,676 | 6,447 | 7,376 | 6,772 |
| MASTER'S IN S&E | 648 | 946 | 442 | 548 | 4 | 19 | 118 | 248 | 84 | 131 |
| BACHELOR'S IN S&E | 402 | 477 | 226 | 308 | 2 | 19 | 103 | 100 | 73 | 50 |
| OTHER DEGREE GRANTING | 21 | 131 | 21 | 91 | 0 | 0 | 0 | 41 | 0 | 9 |
| TWO-YEAR | 95 | 94 | 21 | 23 | 0 | 0 | 45 | 51 | 29 | 20 |
| OTHER S&E ACTIVITIES | | | | | | | | | | |
| TOTAL | 15,814 | 15,550 | 4,592 | 4,361 | 2,419 | 2,745 | 4,218 | 3,883 | 4,585 | 4,561 |
| DOCTORATE IN S&E | 13,807 | 13,907 | 3,848 | 3,788 | 2,366 | 2,598 | 3,283 | 3,215 | 4,310 | 4,306 |
| MASTER'S IN S&E | 730 | 697 | 386 | 357 | 19 | 39 | 247 | 202 | 78 | 99 |
| BACHELOR'S IN S&E | 566 | 410 | 259 | 114 | 21 | 101 | 196 | 121 | 90 | 74 |
| OTHER DEGREE GRANTING | 22 | 51 | 8 | 41 | 0 | 0 | 6 | 0 | 8 | 1 |
| TWO-YEAR | 689 | 531 | 91 | 98 | 13 | 7 | 486 | 345 | 99 | 81 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-25. NUMBER OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED AT UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT AND SEX: JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | MEN | | | WOMEN | | |
|---|---|---|---|---|---|---|---|
| | | NUMBER | PERCENT DISTRIBUTION | PERCENT OF TOTAL | NUMBER | PERCENT DISTRIBUTION | PERCENT OF TOTAL |
| TOTAL | 239,212 | 202,562 | 100.0 | 84.7 | 36,650 | 100.0 | 15.3 |
| ENGINEERS (TOTAL) | 22,478 | 22,107 | 10.9 | 98.3 | 371 | 1.0 | 1.7 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 947 | 922 | .5 | 97.4 | 25 | .1 | 2.6 |
| (2) CHEMICAL ENGINEERS | 1,590 | 1,566 | .8 | 98.5 | 24 | .1 | 1.5 |
| (3) CIVIL ENGINEERS | 3,794 | 3,731 | 1.8 | 98.3 | 63 | .2 | 1.7 |
| (4) ELECTRICAL ENGINEERS | 5,367 | 5,310 | 2.6 | 98.9 | 57 | .2 | 1.1 |
| (5) MECHANICAL ENGINEERS | 4,328 | 4,298 | 2.1 | 99.3 | 30 | .1 | .7 |
| (6) OTHER ENGINEERS | 6,452 | 6,280 | 3.1 | 97.3 | 172 | .5 | 2.7 |
| PHYSICAL SCIENTISTS (TOTAL) | 26,833 | 24,830 | 12.3 | 92.5 | 2,003 | 5.5 | 7.5 |
| (1) CHEMISTS | 13,943 | 12,509 | 6.2 | 89.7 | 1,434 | 3.9 | 10.3 |
| (2) PHYSICISTS | 10,953 | 10,569 | 5.2 | 96.5 | 384 | 1.0 | 3.5 |
| (3) OTHER PHYSICAL SCIENTISTS | 1,937 | 1,752 | .9 | 90.4 | 185 | .5 | 9.6 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 6,782 | 6,462 | 3.2 | 95.3 | 320 | .9 | 4.7 |
| (1) EARTH SCIENTISTS | 5,168 | 4,944 | 2.4 | 95.7 | 224 | .6 | 4.3 |
| (2) ATMOSPHERIC SCIENTISTS | 564 | 530 | .3 | 94.0 | 34 | .1 | 6.0 |
| (3) OCEANOGRAPHERS | 1,050 | 988 | .5 | 94.1 | 62 | .2 | 5.9 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 22,524 | 19,596 | 9.7 | 87.0 | 2,928 | 8.0 | 13.0 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 18,747 | 16,275 | 8.0 | 86.8 | 2,472 | 6.7 | 13.2 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 3,777 | 3,321 | 1.6 | 87.9 | 456 | 1.2 | 12.1 |
| LIFE SCIENTISTS (TOTAL) | 92,419 | 73,155 | 36.1 | 79.2 | 19,264 | 52.6 | 20.8 |
| (1) AGRICULTURAL SCIENTISTS | 13,970 | 11,656 | 5.8 | 83.4 | 2,314 | 6.3 | 16.6 |
| (2) BIOLOGICAL SCIENTISTS | 33,291 | 26,933 | 13.3 | 80.9 | 6,358 | 17.3 | 19.1 |
| (3) MEDICAL SCIENTISTS | 45,158 | 34,566 | 17.1 | 76.5 | 10,592 | 28.9 | 23.5 |
| PSYCHOLOGISTS (TOTAL) | 16,125 | 12,509 | 6.2 | 77.6 | 3,616 | 9.9 | 22.4 |
| SOCIAL SCIENTISTS (TOTAL) | 52,051 | 43,903 | 21.7 | 84.3 | 8,148 | 22.2 | 15.7 |
| (1) ECONOMISTS | 10,230 | 9,356 | 4.6 | 91.5 | 874 | 2.4 | 8.5 |
| (2) SOCIOLOGISTS | 10,777 | 8,147 | 4.0 | 75.6 | 2,630 | 7.2 | 24.4 |
| (3) POLITICAL SCIENTISTS | 8,741 | 7,842 | 3.9 | 89.7 | 899 | 2.5 | 10.3 |
| (4) HISTORIANS | 13,572 | 11,804 | 5.8 | 87.0 | 1,768 | 4.8 | 13.0 |
| (5) OTHER SOCIAL SCIENTISTS | 8,731 | 6,754 | 3.3 | 77.4 | 1,977 | 5.4 | 22.6 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-26. NUMBER OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED AT UNIVERSITIES AND COLLEGES, BY TYPE OF INSTITUTION, CONTROL AND SEX: JANUARY 1975

| TYPE OF INSTITUTION AND CONTROL | TOTAL | MEN | | | WOMEN | | |
|---|---|---|---|---|---|---|---|
| | | NUMBER | PERCENT DISTRIBUTION | PERCENT OF TOTAL | NUMBER | PERCENT DISTRIBUTION | PERCENT OF TOTAL |
| ALL INSTITUTIONS | | | | | | | |
| TOTAL | 239,212 | 202,562 | 100.0 | 84.7 | 36,650 | 100.0 | 15.3 |
| PUBLIC | 167,704 | 142,266 | 70.2 | 84.8 | 25,438 | 69.4 | 15.2 |
| PRIVATE | 71,508 | 60,296 | 29.8 | 84.3 | 11,212 | 30.6 | 15.7 |
| INSTITUTIONS GRANTING: | | | | | | | |
| DOCTORATE IN SCE | | | | | | | |
| TOTAL | 154,922 | 132,448 | 65.4 | 85.5 | 22,474 | 61.3 | 14.5 |
| PUBLIC | 108,070 | 92,410 | 45.6 | 85.5 | 15,660 | 42.7 | 14.5 |
| PRIVATE | 46,852 | 40,038 | 19.8 | 85.5 | 6,814 | 18.6 | 14.5 |
| MASTER'S IN SCE | | | | | | | |
| TOTAL | 30,675 | 26,325 | 13.0 | 85.8 | 4,350 | 11.9 | 14.2 |
| PUBLIC | 25,008 | 21,597 | 10.7 | 86.4 | 3,411 | 9.3 | 13.6 |
| PRIVATE | 5,667 | 4,728 | 2.3 | 83.4 | 939 | 2.6 | 16.6 |
| BACHELOR'S IN SCE | | | | | | | |
| TOTAL | 25,784 | 21,754 | 10.7 | 84.4 | 4,030 | 11.0 | 15.6 |
| PUBLIC | 9,416 | 8,214 | 4.1 | 87.2 | 1,202 | 3.3 | 12.8 |
| PRIVATE | 16,368 | 13,540 | 6.7 | 82.7 | 2,828 | 7.7 | 17.3 |
| OTHER THAN SCIENCE | | | | | | | |
| TOTAL | 951 | 783 | .4 | 82.3 | 168 | .5 | 17.7 |
| PUBLIC | 193 | 154 | .1 | 79.8 | 39 | .1 | 20.2 |
| PRIVATE | 758 | 629 | .3 | 83.0 | 129 | .4 | 17.0 |
| TWO-YEAR INSTITUTIONS | | | | | | | |
| TOTAL | 26,880 | 21,252 | 10.5 | 79.1 | 5,628 | 15.4 | 20.9 |
| PUBLIC | 25,017 | 19,891 | 9.8 | 79.5 | 5,126 | 14.0 | 20.5 |
| PRIVATE | 1,863 | 1,361 | .7 | 73.1 | 502 | 1.4 | 26.9 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-27. FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED AT 50 LEADING UNIVERSITIES AND COLLEGES JANUARY 1974-75

| INSTITUTIONS RANKED ON 1975 NUMBER | 1975 NUMBER | 1975 PERCENT OF TOTAL | 1974 NUMBER | 1974 PERCENT OF TOTAL |
|---|---|---|---|---|
| UNITED STATES TOTAL | 239,212 | 100.00 | 232,906 | 100.00 |
| 1 UNIVERSITY OF MICHIGAN | 3,293 | 1.38 | 2,718 1/ | 1.17 |
| 2 HARVARD UNIVERSITY | 2,909 | 1.22 | 2,782 | 1.19 |
| 3 UNIVERSITY OF MINNESOTA | 2,782 | 1.16 | 2,663 | 1.14 |
| 4 UNIV OF WISCONSIN-MADISON | 2,729 | 1.14 | 2,708 | 1.16 |
| 5 OHIO STATE UNIVERSITY | 2,369 | 0.99 | 2,344 | 1.01 |
| 6 TEXAS A & M UNIVERSITY | 2,324 | 0.97 | 2,214 | 0.95 |
| 7 UNIVERSITY OF WASHINGTON | 2,095 | 0.88 | 2,240 | 0.96 |
| 8 UNIV ILLINOIS URBANA | 2,037 | 0.85 | 1,981 | 0.85 |
| 9 UNIVERSITY OF FLORIDA | 1,963 | 0.82 | 1,953 | 0.84 |
| 10 PENNSYLVANIA STATE UNIV | 1,930 | 0.81 | 1,740 | 0.75 |
| TOTAL FIRST 10 INSTS. | 24,431 | 10.21 | 23,343 | 10.02 |
| 11 JOHNS HOPKINS UNIVERSITY | 1,889 | 0.79 | 1,737 | 0.75 |
| 12 UNIV OF TEXAS AT AUSTIN | 1,743 | 0.73 | 1,645 | 0.71 |
| 13 MASS INST OF TECHNOLOGY | 1,711 | 0.72 | 2,475 | 1.06 |
| 14 CORNELL UNIVERSITY | 1,709 | 0.71 | 1,611 1/ | 0.69 |
| 15 YALE UNIVERSITY | 1,677 | 0.70 | 1,728 | 0.74 |
| 16 STANFORD UNIVERSITY | 1,660 | 0.69 | 1,723 | 0.74 |
| 17 WASHINGTON UNIV ST LOUIS | 1,608 | 0.67 | 1,539 | 0.66 |
| 18 UNIVERSITY OF PITTSBURGH | 1,603 | 0.67 | 1,500 | 0.64 |
| 19 PURDUE UNIV ALL CAMPUSES | 1,582 | 0.66 | 1,569 | 0.67 |
| 20 MICHIGAN STATE UNIVERSITY | 1,574 | 0.66 | 1,524 | 0.65 |
| TOTAL FIRST 20 INSTS. | 41,187 | 17.22 | 40,394 | 17.34 |
| 21 UNIV OF NC AT CHAPEL HILL | 1,567 | 0.66 | 1,167 | 0.50 |
| 22 N C STATE UNIV AT RALEIGH | 1,559 | 0.65 | 1,408 1/ | 0.60 |
| 23 U OF CAL LOS ANGELES | 1,512 | 0.63 | 1,444 | 0.62 |
| 24 RUTGERS THE STATE UNIV | 1,461 | 0.61 | 1,154 | 0.50 |
| 25 UNIV OF MD COLLEGE PARK | 1,409 | 0.59 | 1,376 | 0.59 |
| 26 U OF CAL BERKELEY | 1,402 | 0.59 | 1,417 | 0.61 |
| 27 WAYNE STATE UNIVERSITY 2/ | 1,382 | 0.58 | 1,352 | 0.58 |
| 28 NEW YORK UNIVERSITY | 1,377 | 0.58 | 1,378 | 0.59 |
| 29 COLUMBIA UNIV MAIN DIV | 1,343 | 0.56 | 1,317 | 0.57 |
| 30 CASE WESTERN RESERVE UNIV | 1,308 | 0.55 | 1,175 | 0.50 |
| TOTAL FIRST 30 INSTS. | 55,507 | 23.20 | 53,582 | 23.01 |
| 31 UNIV OF PENNSYLVANIA | 1,298 | 0.54 | 1,261 | 0.54 |
| 32 UNIVERSITY OF CHICAGO | 1,273 | 0.53 | 1,280 | 0.55 |
| 33 UNIV OF MISSOURI COLUMBIA | 1,245 | 0.52 | 1,192 | 0.51 |
| 34 UNIV OF STHRN CALIFORNIA | 1,232 | 0.52 | 1,137 | 0.49 |
| 35 DUKE UNIVERSITY | 1,210 | 0.51 | 1,226 | 0.53 |
| 36 UNIVERSITY OF ARIZONA | 1,208 | 0.50 | 1,236 | 0.53 |
| 37 LA ST U BATON ROUGE | 1,189 | 0.50 | 1,141 | 0.49 |
| 38 UNIVERSITY OF IOWA | 1,186 | 0.50 | 1,424 | 0.61 |
| 39 UNIVERSITY OF KANSAS | 1,180 | 0.49 | 1,072 | 0.46 |
| 40 UNIVERSITY OF COLORADO | 1,124 | 0.47 | 1,097 | 0.47 |
| TOTAL FIRST 40 INSTS. | 67,652 | 28.28 | 65,648 | 28.19 |
| 41 U OF CAL DAVIS | 1,114 | 0.47 | 1,033 | 0.44 |
| 42 IOWA ST U OF SCI & TECH | 1,113 | 0.47 | 1,107 | 0.48 |
| 43 TEMPLE UNIVERSITY | 1,104 | 0.46 | 1,287 | 0.55 |
| 44 UNIVERSITY OF GEORGIA | 1,035 | 0.43 | 1,075 | 0.46 |
| 45 UNIV OF HAWAII AT MANOA | 972 | 0.41 | 903 | 0.39 |
| 46 OREGON STATE UNIVERSITY | 962 | 0.40 | 931 | 0.40 |
| 47 WEST VIRGINIA UNIVERSITY | 959 | 0.40 | 911 | 0.39 |
| 48 UNIVERSITY OF ARKANSAS | 953 | 0.40 | 909 | 0.39 |
| 49 UNIVERSITY OF CONNECTICUT | 945 | 0.40 | 959 | 0.41 |
| 50 NORTHWESTERN UNIVERSITY | 942 | 0.39 | 832 | 0.36 |
| TOTAL FIRST 50 INSTS. | 77,751 | 32.50 | 75,595 | 32.46 |

1/. Partially estimated by National Science Foundation.
2/ Data are approximate.

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-28. DISTRIBUTION OF FULL-TIME SCIENTISTS AND ENGINEERS AT 50 LEADING PUBLIC UNIVERSITIES IN EMPLOYMENT OF SCIENTISTS AND ENGINEERS, BY EMPLOYMENT CATEGORY AND SEX: JANUARY 1973

| | TOTAL, ALL CATEGORIES | | ENGINEERING | | PHYSICAL SCIENCES | | ENVIRONMENTAL SCIENCES | | MATHEMATICAL SCIENCES | | LIFE SCIENCES | | PSYCHOLOGY | | SOCIAL SCIENCES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GRAND TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN |
| TOTAL, ALL PUBLIC INSTITUTIONS | 167704 | 25438 | 16424 | 229 | 17619 | 1212 | 5315 | 239 | 16681 | 2164 | 63792 | 13465 | 11394 | 2541 | 36479 | 5588 |
| 1 UNIVERSITY OF MICHIGAN | 3293 | 774 | 368 | 21 | 263 | 36 | 82 | 2 | 123 | 12 | 1889 | 561 | 154 | 45 | 434 | 97 |
| 2 UNIVERSITY OF MINNESOTA | 2782 | 438 | 184 | 1 | 163 | 8 | 61 | 3 | 136 | 10 | 1551 | 281 | 121 | 20 | 566 | 115 |
| 3 UNIV OF WISCONSIN-MADISON | 2729 | 562 | 239 | 17 | 262 | 14 | 130 | 15 | 111 | 3 | 1340 | 336 | 213 | 71 | 434 | 106 |
| 4 OHIO STATE UNIVERSITY | 2369 | 485 | 263 | 4 | 157 | 5 | 93 | 1 | 100 | 6 | 1454 | 426 | 48 | 5 | 294 | 38 |
| 5 TEXAS A & M UNIVERSITY | 2324 | 474 | 349 | 6 | 96 | 1 | 67 | 3 | 61 | 5 | 1379 | 410 | 29 | 8 | 343 | 41 |
| 6 UNIVERSITY OF WASHINGTON | 2095 | 555 | 176 | 3 | 109 | 6 | 140 | 8 | 65 | 2 | 1396 | 513 | 38 | 6 | 151 | 17 |
| 7 UNIV ILLINOIS URBANA | 2037 | 319 | 354 | 7 | 210 | 11 | 36 | 2 | 200 | 25 | 915 | 244 | 89 | 12 | 233 | 18 |
| 8 UNIVERSITY OF FLORIDA | 1963 | 162 | 183 | 2 | 149 | 2 | 34 | 0 | 91 | 7 | 1123 | 90 | 85 | 12 | 298 | 49 |
| 9 PENNSYLVANIA STATE UNIV | 1930 | 148 | 443 | 5 | 204 | 10 | 90 | 2 | 174 | 19 | 664 | 70 | 82 | 18 | 253 | 24 |
| 10 UNIV OF TEXAS AT AUSTIN | 1743 | 353 | 270 | 30 | 405 | 30 | 116 | 19 | 145 | 21 | 262 | 94 | 145 | 44 | 420 | 115 |
| TOTAL 1ST 10 INSTS. | 23265 | 4270 | 2809 | 96 | 2018 | 123 | 829 | 59 | 1206 | 110 | 11973 | 3025 | 1004 | 241 | 3426 | 620 |
| 11 UNIVERSITY OF PITTSBURGH | 1603 | 451 | 123 | 2 | 126 | 6 | 17 | 0 | 112 | 21 | 878 | 330 | 113 | 49 | 234 | 43 |
| 12 PURDUE UNIV ALL CAMPUSES | 1582 | 190 | 330 | 4 | 186 | 6 | 24 | 1 | 159 | 14 | 572 | 86 | 66 | 10 | 245 | 29 |
| 13 MICHIGAN STATE UNIVERSITY | 1574 | 189 | 118 | 0 | 173 | 5 | 35 | 0 | 130 | 11 | 703 | 113 | 114 | 21 | 301 | 39 |
| 14 UNIV OF NC AT CHAPEL HILL | 1567 | 279 | 0 | 0 | 98 | 2 | 39 | 5 | 60 | 1 | 1061 | 214 | 57 | 12 | 252 | 45 |
| 15 U OF CAL LOS ANGELES | 1512 | 185 | 150 | 3 | 155 | 7 | 52 | 3 | 71 | 4 | 744 | 129 | 67 | 11 | 273 | 28 |
| 16 RUTGERS THE STATE UNIV | 1461 | 275 | 91 | 0 | 144 | 13 | 65 | 6 | 152 | 30 | 415 | 74 | 110 | 31 | 484 | 121 |
| 17 UNIV OF MD COLLEGE PARK | 1409 | 219 | 157 | 2 | 281 | 8 | 16 | 1 | 131 | 12 | 456 | 126 | 127 | 32 | 241 | 38 |
| 18 U OF CAL BERKELEY | 1402 | 159 | 281 | 5 | 187 | 14 | 20 | 0 | 79 | 4 | 474 | 80 | 48 | 11 | 313 | 45 |
| 19 WAYNE STATE UNIVERSITY 1/ | 1382 | 292 | 82 | 1 | 94 | 7 | 9 | 0 | 73 | 4 | 894 | 188 | 48 | 6 | 182 | 46 |
| 20 UNIV OF MISSOURI COLUMBIA | 1245 | 69 | 127 | 0 | 72 | 0 | 18 | 1 | 48 | 0 | 748 | 38 | 44 | 0 | 195 | 22 |
| TOTAL 1ST 20 INSTS. | 38002 | 6498 | 4261 | 113 | 3534 | 191 | 1124 | 72 | 2221 | 211 | 18918 | 4403 | 1790 | 432 | 6146 | 1076 |
| 21 UNIVERSITY OF ARIZONA | 1208 | 97 | 149 | 2 | 104 | 11 | 73 | 2 | 108 | 14 | 490 | 43 | 57 | 13 | 174 | 12 |
| 22 LA ST U BATON ROUGE | 1189 | 256 | 163 | 0 | 78 | 1 | 47 | 4 | 75 | 10 | 742 | 214 | 22 | 4 | 122 | 23 |
| 23 UNIVERSITY OF IOWA | 1186 | 148 | 64 | 1 | 74 | 0 | 13 | 0 | 59 | 4 | 771 | 124 | 31 | 4 | 174 | 15 |
| 24 UNIVERSITY OF KANSAS | 1180 | 224 | 79 | 0 | 83 | 0 | 49 | 5 | 65 | 6 | 589 | 134 | 92 | 22 | 223 | 57 |
| 25 UNIVERSITY OF COLORADO | 1124 | 114 | 127 | 1 | 176 | 3 | 23 | 0 | 72 | 7 | 496 | 78 | 69 | 7 | 161 | 18 |
| 26 U OF CAL DAVIS | 1114 | 88 | 76 | 1 | 73 | 0 | 32 | 0 | 31 | 1 | 698 | 58 | 16 | 0 | 188 | 28 |
| 27 IOWA ST U OF SCI & TECH | 1113 | 103 | 305 | 3 | 83 | 3 | 40 | 0 | 86 | 5 | 395 | 42 | 25 | 4 | 179 | 46 |
| 28 TEMPLE UNIVERSITY | 1104 | 193 | 27 | 0 | 68 | 4 | 0 | 0 | 71 | 6 | 620 | 124 | 117 | 29 | 201 | 30 |
| 29 UNIVERSITY OF GEORGIA | 1035 | 77 | 24 | 0 | 86 | 6 | 37 | 3 | 62 | 5 | 545 | 41 | 95 | 13 | 186 | 9 |
| 30 UNIV OF HAWAII AT MANOA | 972 | 132 | 87 | 2 | 67 | 3 | 74 | 2 | 41 | 3 | 409 | 81 | 45 | 6 | 249 | 35 |
| TOTAL 1ST 30 INSTS. | 49227 | 7930 | 5275 | 123 | 4506 | 232 | 1512 | 88 | 2891 | 272 | 24673 | 5342 | 2363 | 534 | 8007 | 1349 |
| 31 OREGON STATE UNIVERSITY | 982 | 88 | 118 | 1 | 88 | 4 | 98 | 3 | 73 | 4 | 437 | 54 | 18 | 6 | 130 | 16 |
| 32 WEST VIRGINIA UNIVERSITY | 959 | 96 | 123 | 4 | 38 | 1 | 14 | 0 | 43 | 10 | 614 | 60 | 36 | 7 | 91 | 6 |
| 33 UNIVERSITY OF ARKANSAS | 953 | 203 | 91 | 0 | 49 | 2 | 11 | 1 | 24 | 4 | 620 | 144 | 18 | 3 | 140 | 29 |
| 34 UNIVERSITY OF CONNECTICUT | 945 | 182 | 82 | 1 | 73 | 4 | 35 | 4 | 44 | 4 | 492 | 145 | 63 | 12 | 156 | 12 |
| 35 UNIV OF KENTUCKY ALL CAM | 907 | 52 | 89 | 0 | 40 | 1 | 12 | 1 | 66 | 2 | 525 | 42 | 37 | 2 | 138 | 4 |
| 36 U OF CAL SAN DIEGO | 900 | 79 | 41 | 0 | 181 | 6 | 94 | 6 | 37 | 2 | 443 | 51 | 24 | 3 | 83 | 11 |
| 37 SUNY BUFFALO | 898 | 98 | 91 | 1 | 113 | 5 | 14 | 0 | 131 | 19 | 325 | 40 | 68 | 9 | 156 | 24 |
| 38 GEORGIA INSTITUTE OF TECH | 847 | 35 | 464 | 8 | 134 | 2 | 11 | 0 | 79 | 6 | 18 | 4 | 13 | 2 | 128 | 13 |
| 39 COLORADO STATE UNIVERSITY | 843 | 43 | 149 | 2 | 50 | 1 | 27 | 1 | 68 | 3 | 425 | 25 | 24 | 2 | 104 | 9 |
| 40 UNIV OF NEBRASKA - LNCLN | 825 | 103 | 125 | 0 | 78 | 1 | 12 | 0 | 47 | 3 | 457 | 93 | 20 | 1 | 86 | 5 |
| TOTAL 1ST 40 INSTS. | 58266 | 8909 | 6644 | 140 | 5350 | 249 | 1840 | 104 | 3503 | 329 | 29029 | 6028 | 2681 | 581 | 9219 | 1478 |
| 41 UNIV OF MASS AT AMHERST | 815 | 98 | 125 | 0 | 105 | 5 | 33 | 2 | 86 | 9 | 228 | 50 | 52 | 11 | 186 | 21 |
| 42 KANSAS ST UNIVERSITY | 806 | 121 | 99 | 2 | 57 | 1 | 17 | 0 | 45 | 3 | 474 | 107 | 14 | 1 | 100 | 7 |
| 43 UNIVERSITY OF CINCINNATI | 799 | 108 | 102 | 2 | 49 | 2 | 16 | 1 | 35 | 3 | 489 | 91 | 29 | 1 | 79 | 8 |
| 44 U OF CAL SAN FRANCISCO | 798 | 160 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 794 | 159 | 1 | 1 | 0 | 0 |
| 45 OKLAHOMA STATE UNIVERSITY | 759 | 28 | 137 | 0 | 50 | 4 | 8 | 0 | 38 | 2 | 385 | 14 | 37 | 6 | 104 | 2 |
| 46 VIRGINIA COMMONWLTH UNIV | 738 | 117 | 0 | 0 | 17 | 0 | 0 | 0 | 32 | 2 | 527 | 83 | 24 | 2 | 138 | 30 |
| 47 U OF ILL MEDICAL CENTER | 733 | 211 | 0 | 0 | 17 | 2 | 0 | 0 | 0 | 0 | 703 | 206 | 13 | 3 | 0 | 0 |
| 48 UNIV ALABAMA BIRMINGHAM | 715 | 122 | 28 | 0 | 26 | 2 | 2 | 0 | 42 | 9 | 565 | 103 | 17 | 4 | 43 | 4 |
| 49 U TENNESSEE KNOXVILLE | 689 | 119 | 144 | 1 | 84 | 5 | 24 | 0 | 63 | 7 | 140 | 60 | 50 | 7 | 184 | 39 |
| 50 SUNY STONY BROOK | 688 | 89 | 43 | 1 | 96 | 3 | 25 | 0 | 71 | 3 | 260 | 48 | 49 | 11 | 144 | 23 |
| TOTAL 1ST 50 INSTS. | 65806 | 10082 | 7314 | 146 | 5851 | 273 | 1965 | 107 | 3918 | 367 | 33594 | 6949 | 2967 | 628 | 10197 | 1612 |
| TOTAL ALL OTHER INSTS. | 101898 | 15356 | 9110 | 83 | 11768 | 939 | 3350 | 132 | 12763 | 1797 | 30198 | 6516 | 8427 | 1913 | 26282 | 3976 |

NOTE: TABLE DOES NOT INCLUDE ANY LEADING INSTITUTION THAT (1) REQUIRED NATIONAL SCIENCE FOUNDATION ESTIMATES, OR (2) REQUESTED THAT ITS DATA BE HELD CONFIDENTIAL.

1/ DATA ARE APPROXIMATE.

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-29. DISTRIBUTION OF FULL-TIME SCIENTISTS AND ENGINEERS AT 50 LEADING PRIVATE UNIVERSITIES IN EMPLOYMENT OF SCIENTISTS AND ENGINEERS, BY EMPLOYMENT CATEGORY AND SEX: JANUARY 1975

| | TOTAL, ALL CATEGORIES | | ENGINEERING | | PHYSICAL SCIENCES | | ENVIRONMENTAL SCIENCES | | MATHEMATICAL SCIENCES | | LIFE SCIENCES | | PSYCHOLOGY | | SOCIAL SCIENCES | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GRAND TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN | TOTAL | WOMEN |
| TOTAL, ALL PRIVATE INSTITUTIONS | 71587 | 11212 | 6054 | 142 | 9214 | 791 | 1467 | 81 | 5843 | 764 | 28627 | 5799 | 4734 | 1075 | 15572 | 2560 |
| 1 HARVARD UNIVERSITY | 2969 | 374 | 43 | 1 | 241 | 17 | 16 | 0 | 41 | 4 | 2343 | 325 | 51 | 9 | 174 | 18 |
| 2 JOHNS HOPKINS UNIVERSITY | 1889 | 263 | 95 | 1 | 95 | 6 | 31 | 1 | 55 | 8 | 1500 | 219 | 30 | 8 | 123 | 20 |
| 3 MASS INST OF TECHNOLOGY | 1711 | 127 | 766 | 61 | 290 | 23 | 80 | 15 | 131 | 13 | 239 | 91 | 23 | 6 | 182 | 18 |
| 4 CORNELL UNIVERSITY | 1709 | 208 | 246 | 6 | 149 | 8 | 44 | 1 | 42 | 0 | 868 | 113 | 28 | 7 | 332 | 73 |
| 5 YALE UNIVERSITY | 1677 | 480 | 53 | 0 | 137 | 11 | 37 | 3 | 44 | 1 | 1191 | 418 | 49 | 24 | 166 | 23 |
| 6 STANFORD UNIVERSITY | 1660 | 282 | 210 | 5 | 153 | 6 | 36 | 1 | 70 | 4 | 1026 | 233 | 31 | 10 | 134 | 23 |
| 7 WASHINGTON UNIV ST LOUIS | 1608 | 264 | 72 | 1 | 54 | 4 | 11 | 3 | 27 | 0 | 1321 | 237 | 25 | 3 | 98 | 16 |
| 8 NEW YORK UNIVERSITY | 1377 | 279 | 9 | 1 | 102 | 3 | 1 | 0 | 95 | 5 | 844 | 225 | 79 | 20 | 247 | 25 |
| 9 COLUMBIA UNIV MAIN DIV | 1343 | 236 | 105 | 3 | 149 | 6 | 87 | 3 | 35 | 2 | 771 | 200 | 33 | 8 | 163 | 14 |
| 10 CASE WESTERN RESERVE UNIV | 1308 | 190 | 112 | 2 | 92 | 4 | 12 | 0 | 39 | 4 | 946 | 165 | 36 | 3 | 71 | 12 |
| TOTAL 1ST 10 INSTS. | 17191 | 2803 | 1671 | 81 | 1462 | 88 | 359 | 27 | 579 | 41 | 11049 | 2226 | 385 | 96 | 1690 | 242 |
| 11 UNIV OF PENNSYLVANIA | 1298 | 208 | 96 | 5 | 99 | 2 | 6 | 0 | 54 | 7 | 834 | 162 | 25 | 6 | 184 | 26 |
| 12 UNIVERSITY OF CHICAGO | 1273 | 202 | 33 | 0 | 170 | 8 | 41 | 2 | 66 | 1 | 752 | 152 | 90 | 14 | 161 | 29 |
| 13 UNIV OF STHRN CALIFORNIA | 1232 | 174 | 132 | 3 | 70 | 5 | 21 | 2 | 44 | 2 | 777 | 143 | 37 | 2 | 131 | 14 |
| 14 DUKE UNIVERSITY | 1210 | 203 | 42 | 0 | 64 | 2 | 14 | 3 | 32 | 5 | 890 | 175 | 30 | 4 | 138 | 19 |
| 15 NORTHWESTERN UNIVERSITY | 942 | 80 | 128 | 3 | 104 | 4 | 14 | 0 | 69 | 4 | 431 | 50 | 16 | 3 | 180 | 16 |
| 16 UNIVERSITY OF ROCHESTER | 860 | 74 | 41 | 0 | 134 | 2 | 11 | 0 | 51 | 1 | 441 | 50 | 72 | 15 | 110 | 6 |
| 17 BOSTON UNIVERSITY | 692 | 120 | 15 | 0 | 70 | 6 | 5 | 0 | 20 | 1 | 428 | 76 | 59 | 18 | 95 | 19 |
| 18 PRINCETON UNIVERSITY | 667 | 70 | 154 | 12 | 161 | 6 | 27 | 4 | 74 | 8 | 90 | 22 | 36 | 4 | 125 | 16 |
| 19 CALIFORNIA INST OF TECH | 662 | 63 | 128 | 2 | 275 | 26 | 69 | 3 | 52 | 5 | 107 | 26 | 2 | 0 | 29 | 1 |
| 20 GEORGE WASHINGTON UNIV | 655 | 107 | 54 | 0 | 28 | 1 | 6 | 0 | 84 | 5 | 319 | 55 | 39 | 13 | 125 | 33 |
| TOTAL 1ST 20 INSTS. | 26682 | 4104 | 2496 | 104 | 2637 | 150 | 969 | 48 | 1145 | 78 | 16118 | 3137 | 751 | 180 | 2968 | 413 |
| 21 BAYLOR COLLEGE OF MED | 655 | 211 | 16 | 0 | 12 | 2 | 1 | 0 | 11 | 1 | 592 | 198 | 15 | 5 | 8 | 5 |
| 22 VANDERBILT UNIVERSITY | 653 | 93 | 48 | 8 | 65 | 4 | 0 | 0 | 40 | 3 | 392 | 73 | 29 | 2 | 79 | 11 |
| 23 UNIVERSITY OF MIAMI | 631 | 185 | 66 | 0 | 52 | 1 | 86 | 4 | 1 | 0 | 263 | 48 | 67 | 24 | 102 | 26 |
| 24 HOWARD UNIVERSITY | 573 | 90 | 49 | 2 | 39 | 4 | 0 | 0 | 27 | 5 | 360 | 53 | 14 | 2 | 84 | 24 |
| 25 YESHIVA UNIVERSITY | 500 | 128 | 0 | 0 | 38 | 0 | 0 | 0 | 16 | 1 | 379 | 99 | 32 | 24 | 35 | 8 |
| 26 TULANE UNIVERSITY | 468 | 83 | 37 | 0 | 31 | 3 | 6 | 1 | 30 | 1 | 285 | 66 | 19 | 5 | 60 | 7 |
| 27 CARNEGIE-MELLON UNIV | 467 | 31 | 145 | 3 | 135 | 5 | 0 | 0 | 57 | 4 | 95 | 10 | 28 | 2 | 67 | 8 |
| 28 GEORGETOWN UNIVERSITY | 445 | 84 | 0 | 0 | 24 | 1 | 0 | 0 | 13 | 0 | 320 | 71 | 10 | 1 | 78 | 11 |
| 29 LOMA LINDA UNIVERSITY | 432 | 111 | 8 | 0 | 67 | 18 | 0 | 0 | 19 | 4 | 285 | 81 | 16 | 3 | 37 | 5 |
| 30 ST LOUIS UNIV | 424 | 74 | 7 | 0 | 20 | 0 | 13 | 0 | 11 | 2 | 321 | 66 | 16 | 2 | 41 | 4 |
| TOTAL 1ST 30 INSTS. | 31930 | 5114 | 2859 | 118 | 3120 | 188 | 675 | 45 | 1370 | 99 | 19350 | 3898 | 997 | 252 | 3559 | 522 |
| 31 BRIGHAM YOUNG UNIVERSITY | 398 | 10 | 47 | 0 | 98 | 0 | 11 | 0 | 53 | 2 | 81 | 4 | 49 | 3 | 103 | 1 |
| 32 NORTHEASTERN UNIVERSITY | 394 | 47 | 108 | 0 | 76 | 4 | 11 | 0 | 43 | 4 | 55 | 15 | 27 | 6 | 74 | 18 |
| 33 SYRACUSE UNIVERSITY | 361 | 20 | 80 | 1 | 53 | 2 | 8 | 0 | 43 | 3 | 37 | 4 | 28 | 0 | 112 | 10 |
| 34 BROWN UNIVERSITY | 360 | 34 | 45 | 1 | 62 | 3 | 19 | 0 | 53 | 1 | 69 | 12 | 21 | 4 | 91 | 13 |
| 35 WAKE FOREST UNIVERSITY | 342 | 28 | 6 | 0 | 17 | 0 | 0 | 0 | 12 | 0 | 239 | 18 | 24 | 6 | 44 | 4 |
| 36 ROCKEFELLER UNIVERSITY | 337 | 35 | 3 | 0 | 32 | 1 | 0 | 0 | 14 | 0 | 237 | 21 | 49 | 13 | 0 | 0 |
| 37 THE MED COLL OF WISCONSIN | 321 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 321 | 36 | 0 | 0 | 0 | 0 |
| 38 RICE UNIVERSITY | 318 | 18 | 83 | 3 | 100 | 2 | 12 | 0 | 26 | 2 | 37 | 7 | 9 | 2 | 51 | 2 |
| 39 BRANDEIS UNIVERSITY | 317 | 40 | 0 | 0 | 79 | 5 | 0 | 0 | 26 | 1 | 114 | 17 | 15 | 4 | 83 | 13 |
| 40 UNIVERSITY OF NOTRE DAME | 317 | 10 | 64 | 0 | 70 | 0 | 6 | 0 | 36 | 1 | 41 | 3 | 13 | 2 | 87 | 4 |
| TOTAL 1ST 40 INSTS. | 35395 | 5392 | 3295 | 119 | 3667 | 205 | 742 | 45 | 1678 | 113 | 20581 | 4035 | 1228 | 292 | 4204 | 587 |
| 41 LOYOLA UNIVERSITY | 310 | 49 | 0 | 0 | 18 | 0 | 0 | 0 | 15 | 1 | 166 | 27 | 32 | 5 | 79 | 16 |
| 42 DARTMOUTH COLLEGE | 302 | 26 | 25 | 0 | 32 | 0 | 8 | 0 | 26 | 3 | 117 | 15 | 26 | 5 | 68 | 3 |
| 43 RENSSELAER POLY INST | 288 | 4 | 118 | 0 | 88 | 1 | 8 | 0 | 31 | 1 | 14 | 2 | 8 | 0 | 21 | 0 |
| 44 LEHIGH UNIVERSITY | 285 | 7 | 114 | 2 | 42 | 1 | 12 | 0 | 41 | 1 | 10 | 0 | 11 | 1 | 55 | 2 |
| 45 UNIVERSITY OF DENVER | 280 | 34 | 69 | 2 | 37 | 4 | 4 | 0 | 25 | 0 | 11 | 2 | 23 | 5 | 91 | 21 |
| 46 FAIRLEIGH DICKINSON UNIV | 268 | 45 | 24 | 1 | 40 | 4 | 2 | 0 | 22 | 3 | 71 | 15 | 37 | 11 | 72 | 11 |
| 47 LONG ISLAND UNIVERSITY | 266 | 32 | 6 | 0 | 42 | 2 | 15 | 3 | 28 | 3 | 43 | 4 | 41 | 6 | 91 | 14 |
| 48 CREIGHTON UNIVERSITY | 262 | 45 | 0 | 0 | 14 | 1 | 0 | 0 | 6 | 1 | 212 | 41 | 8 | 1 | 22 | 1 |
| 49 UNIVERSITY OF DAYTON | 251 | 18 | 86 | 2 | 53 | 1 | 3 | 1 | 31 | 3 | 19 | 3 | 16 | 3 | 43 | 5 |
| 50 THOM JEFFERSON UNIV HOSP | 247 | 41 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 243 | 40 | 0 | 0 | 0 | 0 |
| TOTAL 1ST 50 INSTS. | 38154 | 5693 | 3737 | 122 | 4057 | 220 | 794 | 49 | 1903 | 129 | 21487 | 4184 | 1430 | 329 | 4746 | 640 |
| TOTAL ALL OTHER INSTS. | 33354 | 5519 | 2317 | 20 | 5157 | 571 | 673 | 32 | 3940 | 635 | 7140 | 1615 | 3301 | 746 | 10826 | 1920 |

NOTE: TABLE DOES NOT INCLUDE ANY LEADING INSTITUTION THAT (1) REQUIRED NATIONAL SCIENCE FOUNDATION ESTIMATES, OR (2) REQUESTED THAT ITS DATA BE HELD CONFIDENTIAL.

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-30. GEOGRAPHIC DISTRIBUTION OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY CONTROL AND EMPLOYMENT STATUS: JANUARY 1975

| DIVISION AND STATE | PUBLIC INSTITUTIONS | | | PRIVATE INSTITUTIONS | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL-TIME | PART-TIME | TOTAL | FULL-TIME | PART-TIME |
| UNITED STATES TOTAL | 203,135 | 167,704 | 35,431 | 94,058 | 71,508 | 22,550 |
| NEW ENGLAND | 7,856 | 6,838 | 1,018 | 16,869 | 12,512 | 4,357 |
| CONNECTICUT | 2,168 | 1,773 | 395 | 3,250 | 2,537 | 713 |
| MAINE | 776 | 659 | 117 | 236 | 221 | 15 |
| MASSACHUSETTS | 2,990 | 2,745 | 245 | 11,967 | 8,545 | 3,422 |
| NEW HAMPSHIRE | 459 | 403 | 56 | 505 | 409 | 96 |
| RHODE ISLAND | 714 | 649 | 65 | 603 | 533 | 70 |
| VERMONT | 749 | 609 | 140 | 308 | 267 | 41 |
| MIDDLE ATLANTIC | 29,375 | 22,559 | 6,816 | 26,283 | 18,932 | 7,351 |
| NEW JERSEY | 4,978 | 4,026 | 952 | 2,492 | 1,649 | 843 |
| NEW YORK | 16,644 | 11,848 | 4,796 | 14,956 | 11,481 | 3,475 |
| PENNSYLVANIA | 7,753 | 6,685 | 1,068 | 8,835 | 5,802 | 3,033 |
| EAST NORTH CENTRAL | 38,549 | 30,626 | 7,923 | 13,652 | 10,816 | 2,836 |
| ILLINOIS | 8,870 | 7,032 | 1,838 | 5,871 | 4,587 | 1,284 |
| INDIANA | 4,030 | 3,317 | 713 | 1,348 | 1,162 | 186 |
| MICHIGAN | 11,243 | 9,029 | 2,218 | 1,479 | 989 | 490 |
| OHIO | 8,337 | 6,333 | 2,004 | 3,427 | 2,965 | 462 |
| WISCONSIN | 6,069 | 4,919 | 1,150 | 1,527 | 1,113 | 414 |
| WEST NORTH CENTRAL | 17,120 | 15,452 | 1,668 | 6,378 | 4,983 | 1,395 |
| IOWA | 2,948 | 2,733 | 215 | 932 | 777 | 155 |
| KANSAS | 3,088 | 2,817 | 271 | 329 | 272 | 57 |
| MINNESOTA | 4,471 | 3,751 | 720 | 830 | 690 | 140 |
| MISSOURI | 3,376 | 3,148 | 226 | 3,527 | 2,640 | 887 |
| NEBRASKA | 1,607 | 1,482 | 125 | 575 | 448 | 127 |
| NORTH DAKOTA | 731 | 696 | 35 | 26 | 25 | 1 |
| SOUTH DAKOTA | 901 | 825 | 76 | 159 | 131 | 28 |
| SOUTH ATLANTIC | 31,217 | 26,368 | 4,849 | 12,976 | 10,305 | 2,671 |
| DELAWARE | 614 | 583 | 33 | 111 | 91 | 2 |
| DISTRICT OF COLUMBIA | 580 | 278 | 302 | 3,367 | 2,078 | 1,289 |
| FLORIDA | 5,815 | 5,043 | 772 | 1,462 | 1,151 | 311 |
| GEORGIA | 4,155 | 3,680 | 475 | 1,410 | 1,217 | 193 |
| MARYLAND | 4,724 | 3,692 | 1,032 | 2,678 | 2,200 | 478 |
| NORTH CAROLINA | 5,710 | 5,229 | 481 | 2,548 | 2,363 | 185 |
| SOUTH CAROLINA | 2,866 | 2,134 | 732 | 502 | 438 | 64 |
| VIRGINIA | 5,044 | 4,215 | 829 | 760 | 654 | 106 |
| WEST VIRGINIA | 1,709 | 1,516 | 193 | 238 | 195 | 43 |
| EAST SOUTH CENTRAL | 10,890 | 9,623 | 1,267 | 3,084 | 2,600 | 484 |
| ALABAMA | 2,966 | 2,567 | 401 | 549 | 492 | 57 |
| KENTUCKY | 2,175 | 2,000 | 175 | 454 | 352 | 102 |
| MISSISSIPPI | 1,859 | 1,784 | 75 | 191 | 164 | 27 |
| TENNESSEE | 3,888 | 3,272 | 616 | 1,890 | 1,592 | 298 |
| WEST SOUTH CENTRAL | 21,405 | 18,811 | 2,594 | 4,223 | 3,408 | 815 |
| ARKANSAS | 2,136 | 1,963 | 173 | 169 | 132 | 37 |
| LOUISIANA | 3,831 | 3,334 | 497 | 790 | 682 | 108 |
| OKLAHOMA | 2,422 | 2,048 | 374 | 315 | 263 | 52 |
| TEXAS | 13,016 | 11,466 | 1,550 | 2,949 | 2,331 | 618 |
| MOUNTAIN | 11,834 | 10,579 | 1,255 | 1,359 | 1,151 | 208 |
| ARIZONA | 2,576 | 2,163 | 413 | 79 | 74 | 5 |
| COLORADO | 3,846 | 3,466 | 380 | 523 | 459 | 64 |
| IDAHO | 864 | 797 | 67 | 125 | 106 | 19 |
| MONTANA | 808 | 755 | 53 | 73 | 49 | 24 |
| NEVADA | 608 | 478 | 130 | 0 | 0 | 0 |
| NEW MEXICO | 1,257 | 1,148 | 109 | 75 | 43 | 32 |
| UTAH | 1,365 | 1,284 | 81 | 484 | 420 | 64 |
| WYOMING | 510 | 488 | 22 | 0 | 0 | 0 |
| PACIFIC | 33,007 | 25,163 | 7,844 | 8,665 | 6,301 | 2,364 |
| ALASKA | 398 | 382 | 16 | 43 | 42 | 1 |
| CALIFORNIA | 23,262 | 17,061 | 6,201 | 7,770 | 5,542 | 2,228 |
| HAWAII | 1,184 | 989 | 195 | 53 | 44 | 9 |
| OREGON | 3,622 | 2,704 | 918 | 316 | 264 | 52 |
| WASHINGTON | 4,541 | 4,027 | 514 | 483 | 409 | 74 |
| OUTLYING AREAS | 1,882 | 1,685 | 197 | 569 | 500 | 69 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-31. GEOGRAPHIC DISTRIBUTION OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY EMPLOYMENT STATUS AND FUNCTION: JANUARY 1975

| DIVISION AND STATE | FULL-TIME | | | | PART-TIME | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | TEACHING | R & D | OTHER | TOTAL | TEACHING | R & D | OTHER |
| UNITED STATES TOTAL | 239,212 | 181,524 | 43,199 | 14,489 | 57,981 | 50,250 | 6,406 | 1,325 |
| NEW ENGLAND | 19,350 | 14,296 | 4,431 | 623 | 5,375 | 4,463 | 815 | 97 |
| CONNECTICUT | 4,310 | 3,028 | 1,185 | 98 | 1,108 | 912 | 195 | 1 |
| MAINE | 880 | 666 | 161 | 53 | 132 | 117 | 14 | 1 |
| MASSACHUSETTS | 11,290 | 8,363 | 2,739 | 188 | 3,667 | 3,028 | 550 | 89 |
| NEW HAMPSHIRE | 812 | 676 | 93 | 43 | 152 | 129 | 21 | 2 |
| RHODE ISLAND | 1,182 | 892 | 185 | 105 | 135 | 106 | 25 | 4 |
| VERMONT | 876 | 671 | 69 | 136 | 181 | 171 | 10 | 0 |
| MIDDLE ATLANTIC | 41,491 | 34,049 | 6,192 | 1,250 | 14,167 | 13,136 | 756 | 275 |
| NEW JERSEY | 5,675 | 4,758 | 807 | 110 | 1,795 | 1,687 | 85 | 23 |
| NEW YORK | 23,329 | 18,404 | 4,104 | 821 | 8,271 | 7,570 | 463 | 238 |
| PENNSYLVANIA | 12,487 | 10,887 | 1,281 | 319 | 4,101 | 3,879 | 208 | 14 |
| EAST NORTH CENTRAL | 41,442 | 31,614 | 6,903 | 2,925 | 10,759 | 9,006 | 1,363 | 390 |
| ILLINOIS | 11,619 | 8,358 | 1,886 | 1,375 | 3,122 | 2,659 | 230 | 233 |
| INDIANA | 4,479 | 3,672 | 417 | 390 | 899 | 794 | 48 | 57 |
| MICHIGAN | 10,014 | 8,033 | 1,622 | 359 | 2,708 | 2,376 | 304 | 28 |
| OHIO | 9,298 | 7,181 | 1,448 | 669 | 2,466 | 2,071 | 325 | 70 |
| WISCONSIN | 6,032 | 4,370 | 1,530 | 132 | 1,564 | 1,106 | 456 | 2 |
| WEST NORTH CENTRAL | 20,435 | 15,099 | 3,770 | 1,566 | 3,063 | 2,676 | 314 | 73 |
| IOWA | 3,510 | 2,615 | 689 | 206 | 370 | 300 | 50 | 20 |
| KANSAS | 3,089 | 2,248 | 607 | 234 | 328 | 267 | 52 | 9 |
| MINNESOTA | 4,441 | 4,079 | 306 | 56 | 860 | 773 | 83 | 4 |
| MISSOURI | 5,788 | 3,689 | 1,603 | 496 | 1,113 | 993 | 101 | 19 |
| NEBRASKA | 1,930 | 1,351 | 247 | 332 | 252 | 222 | 9 | 21 |
| NORTH DAKOTA | 721 | 531 | 145 | 45 | 36 | 35 | 1 | 0 |
| SOUTH DAKOTA | 956 | 586 | 173 | 197 | 104 | 86 | 18 | 0 |
| SOUTH ATLANTIC | 36,673 | 26,871 | 7,280 | 2,522 | 7,520 | 6,808 | 583 | 129 |
| DELAWARE | 590 | 451 | 108 | 31 | 35 | 30 | 5 | 0 |
| DISTRICT OF COLUMBIA | 2,356 | 1,925 | 373 | 58 | 1,591 | 1,363 | 206 | 22 |
| FLORIDA | 6,194 | 4,491 | 1,355 | 348 | 1,083 | 979 | 92 | 12 |
| GEORGIA | 4,897 | 3,649 | 1,020 | 228 | 668 | 584 | 82 | 2 |
| MARYLAND | 5,892 | 3,429 | 2,053 | 410 | 1,510 | 1,364 | 86 | 60 |
| NORTH CAROLINA | 7,592 | 5,326 | 1,329 | 937 | 665 | 582 | 67 | 17 |
| SOUTH CAROLINA | 2,572 | 2,121 | 266 | 185 | 796 | 780 | 8 | 8 |
| VIRGINIA | 4,869 | 3,960 | 629 | 280 | 935 | 897 | 30 | 8 |
| WEST VIRGINIA | 1,711 | 1,519 | 147 | 45 | 236 | 229 | 7 | 0 |
| EAST SOUTH CENTRAL | 12,223 | 9,363 | 1,818 | 1,042 | 1,751 | 1,600 | 124 | 27 |
| ALABAMA | 3,059 | 2,395 | 543 | 121 | 458 | 420 | 29 | 9 |
| KENTUCKY | 2,352 | 1,757 | 337 | 258 | 277 | 254 | 21 | 2 |
| MISSISSIPPI | 1,948 | 1,614 | 309 | 25 | 102 | 98 | 1 | 3 |
| TENNESSEE | 4,864 | 3,597 | 629 | 638 | 914 | 828 | 73 | 13 |
| WEST SOUTH CENTRAL | 22,219 | 15,702 | 3,777 | 2,740 | 3,409 | 2,804 | 439 | 166 |
| ARKANSAS | 2,095 | 1,357 | 325 | 413 | 210 | 145 | 17 | 48 |
| LOUISIANA | 4,016 | 3,028 | 443 | 545 | 605 | 553 | 35 | 17 |
| OKLAHOMA | 2,311 | 1,749 | 284 | 278 | 426 | 366 | 39 | 21 |
| TEXAS | 13,797 | 9,568 | 2,725 | 1,504 | 2,168 | 1,740 | 348 | 80 |
| MOUNTAIN | 11,730 | 8,626 | 2,163 | 941 | 1,463 | 1,256 | 120 | 87 |
| ARIZONA | 2,237 | 1,559 | 416 | 262 | 418 | 363 | 38 | 17 |
| COLORADO | 3,965 | 3,247 | 569 | 129 | 444 | 374 | 23 | 47 |
| IDAHO | 903 | 629 | 138 | 136 | 86 | 84 | 2 | 0 |
| MONTANA | 804 | 675 | 121 | 8 | 77 | 72 | 3 | 2 |
| NEVADA | 478 | 317 | 129 | 32 | 130 | 113 | 9 | 8 |
| NEW MEXICO | 1,191 | 895 | 233 | 63 | 141 | 128 | 8 | 5 |
| UTAH | 1,704 | 1,011 | 468 | 225 | 145 | 101 | 37 | 7 |
| WYOMING | 488 | 293 | 109 | 86 | 22 | 21 | 0 | 1 |
| PACIFIC | 31,464 | 24,070 | 6,623 | 771 | 10,208 | 8,298 | 1,836 | 74 |
| ALASKA | 424 | 288 | 92 | 44 | 17 | 12 | 4 | 1 |
| CALIFORNIA | 22,603 | 17,970 | 4,288 | 345 | 8,429 | 6,969 | 1,413 | 47 |
| HAWAII | 1,033 | 666 | 248 | 119 | 204 | 170 | 18 | 16 |
| OREGON | 2,968 | 2,087 | 796 | 125 | 970 | 727 | 236 | 7 |
| WASHINGTON | 4,436 | 3,059 | 1,239 | 138 | 588 | 420 | 165 | 3 |
| OUTLYING AREAS | 2,185 | 1,834 | 242 | 109 | 266 | 203 | 56 | 7 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-32. GEOGRAPHIC DISTRIBUTION OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY MAJOR FIELD OF EMPLOYMENT: JANUARY 1975

| DIVISION AND STATE | TOTAL | ENGINEERS | PHYSICAL SCIENTISTS | ENVIRONMENTAL SCIENTISTS | MATHEMATICAL SCIENTISTS | LIFE SCIENTISTS | PSYCHOLOGISTS | SOCIAL SCIENTISTS |
|---|---|---|---|---|---|---|---|---|
| UNITED STATES TOTAL | 267,193 | 27,662 | 30,964 | 7,817 | 28,445 | 115,924 | 21,727 | 64,654 |
| NEW ENGLAND | 24,725 | 2,839 | 2,720 | 668 | 1,893 | 10,044 | 1,689 | 4,892 |
| CONNECTICUT | 5,418 | 424 | 512 | 127 | 436 | 2,241 | 478 | 1,200 |
| MAINE | 1,012 | 89 | 109 | 41 | 108 | 261 | 78 | 326 |
| MASSACHUSETTS | 14,957 | 1,996 | 1,741 | 372 | 1,035 | 6,466 | 799 | 2,548 |
| NEW HAMPSHIRE | 964 | 96 | 109 | 39 | 72 | 335 | 78 | 235 |
| RHODE ISLAND | 1,317 | 148 | 159 | 65 | 156 | 312 | 117 | 360 |
| VERMONT | 1,057 | 86 | 90 | 24 | 86 | 429 | 119 | 223 |
| MIDDLE ATLANTIC | 55,658 | 4,697 | 6,279 | 1,238 | 5,879 | 19,734 | 5,048 | 12,783 |
| NEW JERSEY | 7,470 | 551 | 891 | 197 | 885 | 2,067 | 806 | 2,073 |
| NEW YORK | 31,600 | 2,608 | 3,584 | 731 | 3,491 | 10,919 | 2,876 | 7,391 |
| PENNSYLVANIA | 16,588 | 1,538 | 1,804 | 310 | 1,503 | 6,748 | 1,366 | 3,319 |
| EAST NORTH CENTRAL | 52,201 | 4,963 | 5,320 | 1,319 | 4,908 | 20,751 | 3,798 | 11,142 |
| ILLINOIS | 14,741 | 1,164 | 1,496 | 298 | 1,584 | 5,906 | 1,142 | 3,153 |
| INDIANA | 5,378 | 596 | 634 | 151 | 573 | 1,736 | 418 | 1,270 |
| MICHIGAN | 12,722 | 1,302 | 1,273 | 283 | 1,098 | 5,181 | 914 | 2,671 |
| OHIO | 11,764 | 1,245 | 1,104 | 271 | 1,091 | 4,935 | 758 | 2,360 |
| WISCONSIN | 7,596 | 656 | 815 | 316 | 562 | 2,993 | 566 | 1,688 |
| WEST NORTH CENTRAL | 23,498 | 1,857 | 2,078 | 551 | 1,827 | 10,941 | 1,457 | 4,787 |
| IOWA | 3,880 | 419 | 375 | 89 | 329 | 1,633 | 195 | 840 |
| KANSAS | 3,417 | 270 | 332 | 90 | 306 | 1,349 | 281 | 789 |
| MINNESOTA | 5,301 | 279 | 445 | 121 | 432 | 2,292 | 409 | 1,323 |
| MISSOURI | 6,901 | 515 | 522 | 144 | 453 | 3,752 | 381 | 1,134 |
| NEBRASKA | 2,182 | 149 | 213 | 37 | 153 | 1,169 | 108 | 356 |
| NORTH DAKOTA | 757 | 115 | 97 | 41 | 77 | 235 | 37 | 155 |
| SOUTH DAKOTA | 1,060 | 110 | 97 | 29 | 77 | 511 | 46 | 190 |
| SOUTH ATLANTIC | 44,193 | 3,802 | 4,226 | 978 | 4,643 | 17,481 | 3,138 | 9,925 |
| DELAWARE | 625 | 94 | 102 | 20 | 77 | 148 | 26 | 158 |
| DISTRICT OF COLUMBIA | 3,947 | 304 | 248 | 23 | 430 | 1,842 | 189 | 911 |
| FLORIDA | 7,277 | 769 | 756 | 301 | 870 | 2,200 | 606 | 1,775 |
| GEORGIA | 5,565 | 585 | 526 | 112 | 548 | 2,135 | 407 | 1,252 |
| MARYLAND | 7,402 | 486 | 847 | 99 | 707 | 3,041 | 695 | 1,527 |
| NORTH CAROLINA | 8,258 | 491 | 675 | 163 | 774 | 3,895 | 466 | 1,794 |
| SOUTH CAROLINA | 3,368 | 314 | 310 | 46 | 336 | 1,524 | 171 | 667 |
| VIRGINIA | 5,804 | 541 | 598 | 184 | 740 | 1,879 | 447 | 1,415 |
| WEST VIRGINIA | 1,947 | 218 | 164 | 30 | 161 | 817 | 131 | 426 |
| EAST SOUTH CENTRAL | 13,974 | 1,208 | 1,315 | 229 | 1,496 | 5,621 | 981 | 3,124 |
| ALABAMA | 3,517 | 351 | 348 | 62 | 452 | 1,267 | 231 | 806 |
| KENTUCKY | 2,629 | 150 | 254 | 49 | 237 | 1,126 | 196 | 619 |
| MISSISSIPPI | 2,050 | 173 | 215 | 19 | 260 | 719 | 143 | 521 |
| TENNESSEE | 5,778 | 534 | 498 | 99 | 547 | 2,509 | 413 | 1,178 |
| WEST SOUTH CENTRAL | 25,628 | 2,465 | 2,507 | 674 | 2,349 | 11,224 | 1,423 | 4,986 |
| ARKANSAS | 2,305 | 125 | 164 | 24 | 149 | 1,314 | 89 | 440 |
| LOUISIANA | 4,621 | 331 | 405 | 117 | 458 | 2,378 | 194 | 738 |
| OKLAHOMA | 2,737 | 344 | 266 | 65 | 296 | 875 | 162 | 729 |
| TEXAS | 15,965 | 1,665 | 1,672 | 468 | 1,446 | 6,657 | 978 | 3,079 |
| MOUNTAIN | 13,193 | 1,730 | 1,588 | 564 | 1,363 | 4,189 | 916 | 2,843 |
| ARIZONA | 2,655 | 368 | 345 | 121 | 267 | 815 | 176 | 563 |
| COLORADO | 4,369 | 570 | 548 | 152 | 496 | 1,289 | 342 | 972 |
| IDAHO | 989 | 82 | 89 | 36 | 90 | 442 | 55 | 195 |
| MONTANA | 881 | 97 | 100 | 40 | 89 | 230 | 45 | 280 |
| NEVADA | 608 | 59 | 67 | 57 | 42 | 223 | 30 | 130 |
| NEW MEXICO | 1,332 | 173 | 149 | 62 | 149 | 437 | 81 | 281 |
| UTAH | 1,849 | 301 | 232 | 68 | 166 | 593 | 161 | 328 |
| WYOMING | 510 | 80 | 58 | 28 | 64 | 160 | 26 | 94 |
| PACIFIC | 41,672 | 3,941 | 4,653 | 1,521 | 3,825 | 15,244 | 3,090 | 9,398 |
| ALASKA | 441 | 45 | 44 | 12 | 33 | 205 | 21 | 81 |
| CALIFORNIA | 31,032 | 3,163 | 3,644 | 1,010 | 2,918 | 10,667 | 2,351 | 7,279 |
| HAWAII | 1,237 | 93 | 82 | 78 | 61 | 518 | 68 | 337 |
| OREGON | 3,938 | 243 | 427 | 163 | 411 | 1,538 | 326 | 830 |
| WASHINGTON | 5,024 | 397 | 456 | 258 | 402 | 2,316 | 324 | 871 |
| OUTLYING AREAS | 2,451 | 160 | 278 | 75 | 262 | 695 | 207 | 774 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-33. GEOGRAPHIC DISTRIBUTION OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY MAJOR FIELD OF EMPLOYMENT: JANUARY 1975

| DIVISION AND STATE | TOTAL | ENGINEERS | PHYSICAL SCIENTISTS | ENVIRON-MENTAL SCIENTISTS | MATHE-MATICAL SCIENTISTS | LIFE SCIENTISTS | PSYCHO-LOGISTS | SOCIAL SCIENTISTS |
|---|---|---|---|---|---|---|---|---|
| UNITED STATES TOTAL | 239,212 | 22,478 | 26,833 | 6,782 | 22,524 | 92,419 | 16,125 | 52,051 |
| NEW ENGLAND | 19,350 | 2,242 | 2,388 | 564 | 1,564 | 7,355 | 1,241 | 3,996 |
| CONNECTICUT | 4,310 | 298 | 428 | 111 | 323 | 1,928 | 324 | 898 |
| MAINE | 880 | 85 | 107 | 35 | 94 | 219 | 58 | 282 |
| MASSACHUSETTS | 11,290 | 1,573 | 1,522 | 317 | 860 | 4,310 | 613 | 2,095 |
| NEW HAMPSHIRE | 812 | 80 | 99 | 22 | 65 | 293 | 53 | 200 |
| RHODE ISLAND | 1,182 | 128 | 145 | 58 | 141 | 289 | 102 | 319 |
| VERMONT | 876 | 78 | 87 | 21 | 81 | 316 | 91 | 202 |
| MIDDLE ATLANTIC | 41,491 | 3,713 | 5,167 | 1,058 | 4,335 | 14,104 | 3,372 | 9,742 |
| NEW JERSEY | 5,675 | 438 | 720 | 175 | 631 | 1,579 | 558 | 1,574 |
| NEW YORK | 23,329 | 2,028 | 2,907 | 607 | 2,451 | 8,066 | 1,871 | 5,399 |
| PENNSYLVANIA | 12,487 | 1,247 | 1,540 | 276 | 1,253 | 4,459 | 943 | 2,769 |
| EAST NORTH CENTRAL | 41,442 | 4,008 | 4,677 | 1,140 | 3,812 | 16,096 | 2,830 | 8,879 |
| ILLINOIS | 11,619 | 957 | 1,334 | 267 | 1,200 | 4,514 | 817 | 2,530 |
| INDIANA | 4,479 | 525 | 557 | 125 | 468 | 1,436 | 318 | 1,050 |
| MICHIGAN | 10,014 | 1,022 | 1,081 | 248 | 834 | 4,112 | 657 | 2,060 |
| OHIO | 9,298 | 1,026 | 1,011 | 250 | 825 | 3,717 | 567 | 1,902 |
| WISCONSIN | 6,032 | 478 | 694 | 250 | 485 | 2,317 | 471 | 1,337 |
| WEST NORTH CENTRAL | 20,435 | 1,696 | 1,941 | 500 | 1,653 | 9,178 | 1,238 | 4,229 |
| IOWA | 3,510 | 406 | 349 | 72 | 301 | 1,454 | 171 | 757 |
| KANSAS | 3,089 | 237 | 308 | 83 | 279 | 1,250 | 230 | 702 |
| MINNESOTA | 4,441 | 214 | 418 | 116 | 382 | 1,829 | 340 | 1,142 |
| MISSOURI | 5,788 | 469 | 487 | 129 | 413 | 2,971 | 329 | 990 |
| NEBRASKA | 1,930 | 145 | 193 | 36 | 135 | 1,001 | 98 | 324 |
| NORTH DAKOTA | 721 | 115 | 95 | 40 | 74 | 224 | 29 | 144 |
| SOUTH DAKOTA | 956 | 110 | 91 | 26 | 69 | 449 | 41 | 170 |
| SOUTH ATLANTIC | 36,673 | 3,104 | 3,700 | 866 | 3,670 | 14,764 | 2,387 | 8,182 |
| DELAWARE | 590 | 91 | 91 | 20 | 68 | 143 | 26 | 151 |
| DISTRICT OF COLUMBIA | 2,356 | 165 | 193 | 11 | 226 | 1,086 | 122 | 553 |
| FLORIDA | 6,194 | 596 | 677 | 263 | 691 | 1,995 | 476 | 1,496 |
| GEORGIA | 4,897 | 505 | 488 | 102 | 475 | 1,846 | 351 | 1,130 |
| MARYLAND | 5,892 | 408 | 731 | 85 | 530 | 2,591 | 438 | 1,109 |
| NORTH CAROLINA | 7,592 | 432 | 604 | 145 | 674 | 3,726 | 401 | 1,610 |
| SOUTH CAROLINA | 2,572 | 256 | 273 | 41 | 275 | 985 | 144 | 598 |
| VIRGINIA | 4,869 | 475 | 492 | 175 | 588 | 1,630 | 334 | 1,175 |
| WEST VIRGINIA | 1,711 | 176 | 151 | 24 | 143 | 762 | 95 | 360 |
| EAST SOUTH CENTRAL | 12,223 | 1,041 | 1,183 | 214 | 1,240 | 5,044 | 798 | 2,703 |
| ALABAMA | 3,059 | 309 | 306 | 57 | 349 | 1,172 | 188 | 678 |
| KENTUCKY | 2,352 | 136 | 240 | 48 | 215 | 990 | 164 | 559 |
| MISSISSIPPI | 1,948 | 172 | 206 | 18 | 246 | 697 | 118 | 491 |
| TENNESSEE | 4,864 | 424 | 431 | 91 | 430 | 2,185 | 328 | 975 |
| WEST SOUTH CENTRAL | 22,219 | 2,081 | 2,321 | 609 | 2,042 | 9,693 | 1,271 | 4,302 |
| ARKANSAS | 2,095 | 114 | 152 | 22 | 136 | 1,202 | 82 | 387 |
| LOUISIANA | 4,016 | 302 | 392 | 105 | 432 | 1,956 | 166 | 663 |
| OKLAHOMA | 2,311 | 272 | 252 | 49 | 237 | 790 | 133 | 578 |
| TEXAS | 13,797 | 1,393 | 1,525 | 433 | 1,237 | 5,745 | 790 | 2,674 |
| MOUNTAIN | 11,730 | 1,554 | 1,502 | 520 | 1,180 | 3,683 | 786 | 2,505 |
| ARIZONA | 2,237 | 325 | 319 | 106 | 231 | 663 | 136 | 457 |
| COLORADO | 3,925 | 505 | 520 | 145 | 416 | 1,169 | 297 | 873 |
| IDAHO | 903 | 81 | 86 | 27 | 77 | 411 | 51 | 170 |
| MONTANA | 804 | 91 | 97 | 40 | 80 | 206 | 38 | 252 |
| NEVADA | 478 | 49 | 63 | 55 | 39 | 133 | 26 | 113 |
| NEW MEXICO | 1,191 | 148 | 139 | 55 | 135 | 393 | 75 | 246 |
| UTAH | 1,704 | 280 | 220 | 67 | 146 | 552 | 137 | 302 |
| WYOMING | 488 | 75 | 58 | 25 | 56 | 156 | 26 | 92 |
| PACIFIC | 31,464 | 2,899 | 3,710 | 1,243 | 2,789 | 11,904 | 2,119 | 6,800 |
| ALASKA | 424 | 44 | 42 | 12 | 32 | 195 | 20 | 79 |
| CALIFORNIA | 22,603 | 2,220 | 2,833 | 774 | 2,067 | 8,054 | 1,556 | 5,099 |
| HAWAII | 1,033 | 89 | 75 | 74 | 52 | 418 | 50 | 275 |
| OREGON | 2,968 | 189 | 345 | 133 | 292 | 1,224 | 212 | 573 |
| WASHINGTON | 4,436 | 357 | 415 | 250 | 346 | 2,013 | 281 | 774 |
| OUTLYING AREAS | 2,185 | 140 | 244 | 68 | 239 | 598 | 183 | 713 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-34. GEOGRAPHIC DISTRIBUTION OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY CONTROL AND FUNCTION: JANUARY 1975

| DIVISION AND STATE | PUBLIC INSTITUTIONS | | | | PRIVATE INSTITUTIONS | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | TEACHING | R & D | OTHER | TOTAL | TEACHING | R & D | OTHER |
| UNITED STATES TOTAL | 203,135 | 159,405 | 30,786 | 12,944 | 94,058 | 72,369 | 18,819 | 2,870 |
| NEW ENGLAND | 7,856 | 6,614 | 808 | 434 | 16,869 | 12,145 | 4,438 | 286 |
| CONNECTICUT | 2,168 | 1,753 | 350 | 65 | 3,250 | 2,187 | 1,029 | 34 |
| MAINE | 776 | 554 | 173 | 49 | 236 | 229 | 2 | 5 |
| MASSACHUSETTS | 2,990 | 2,863 | 77 | 50 | 11,967 | 8,528 | 3,212 | 227 |
| NEW HAMPSHIRE | 459 | 382 | 37 | 40 | 505 | 423 | 77 | 5 |
| RHODE ISLAND | 714 | 520 | 94 | 100 | 603 | 478 | 116 | 9 |
| VERMONT | 749 | 542 | 77 | 130 | 308 | 300 | 2 | 6 |
| MIDDLE ATLANTIC | 29,375 | 25,970 | 2,598 | 807 | 26,283 | 21,215 | 4,350 | 718 |
| NEW JERSEY | 4,978 | 4,366 | 534 | 78 | 2,492 | 2,079 | 358 | 55 |
| NEW YORK | 16,644 | 14,983 | 1,163 | 498 | 14,956 | 10,991 | 3,404 | 561 |
| PENNSYLVANIA | 7,753 | 6,621 | 901 | 231 | 8,835 | 8,145 | 588 | 102 |
| EAST NORTH CENTRAL | 38,549 | 29,399 | 6,398 | 2,752 | 13,652 | 11,221 | 1,868 | 563 |
| ILLINOIS | 12,870 | 6,559 | 1,146 | 1,165 | 5,871 | 4,458 | 970 | 443 |
| INDIANA | 4,030 | 3,191 | 421 | 418 | 1,348 | 1,275 | 44 | 29 |
| MICHIGAN | 11,243 | 8,977 | 1,914 | 352 | 1,479 | 1,432 | 12 | 35 |
| OHIO | 8,337 | 6,584 | 1,033 | 720 | 3,427 | 2,668 | 740 | 19 |
| WISCONSIN | 6,069 | 4,088 | 1,884 | 97 | 1,527 | 1,388 | 102 | 37 |
| WEST NORTH CENTRAL | 17,120 | 12,895 | 2,940 | 1,285 | 6,378 | 4,880 | 1,144 | 354 |
| IOWA | 2,948 | 2,001 | 736 | 211 | 932 | 914 | 3 | 15 |
| KANSAS | 3,088 | 2,191 | 659 | 238 | 329 | 324 | 0 | 5 |
| MINNESOTA | 4,471 | 4,049 | 381 | 41 | 830 | 803 | 8 | 19 |
| MISSOURI | 3,374 | 2,521 | 588 | 265 | 3,527 | 2,161 | 1,116 | 250 |
| NEBRASKA | 1,607 | 1,074 | 239 | 294 | 575 | 499 | 17 | 59 |
| NORTH DAKOTA | 731 | 540 | 146 | 45 | 25 | 26 | 0 | 0 |
| SOUTH DAKOTA | 901 | 519 | 191 | 191 | 159 | 153 | 0 | 6 |
| SOUTH ATLANTIC | 31,217 | 24,543 | 4,466 | 2,208 | 12,976 | 9,136 | 3,397 | 443 |
| DELAWARE | 614 | 470 | 113 | 31 | 11 | 11 | 0 | 0 |
| DISTRICT OF COLUMBIA | 580 | 570 | 2 | 8 | 3,367 | 2,718 | 577 | 72 |
| FLORIDA | 5,815 | 4,441 | 1,094 | 280 | 1,462 | 1,029 | 353 | 80 |
| GEORGIA | 4,155 | 3,132 | 921 | 102 | 1,410 | 1,101 | 181 | 128 |
| MARYLAND | 4,724 | 3,705 | 583 | 436 | 2,678 | 1,088 | 1,556 | 34 |
| NORTH CAROLINA | 5,710 | 4,141 | 698 | 871 | 2,549 | 1,767 | 698 | 83 |
| SOUTH CAROLINA | 2,866 | 2,419 | 272 | 175 | 502 | 482 | 2 | 18 |
| VIRGINIA | 5,044 | 4,151 | 630 | 263 | 760 | 706 | 29 | 25 |
| WEST VIRGINIA | 1,709 | 1,514 | 153 | 42 | 238 | 234 | 1 | 3 |
| EAST SOUTH CENTRAL | 10,890 | 8,398 | 1,537 | 955 | 3,084 | 2,565 | 405 | 114 |
| ALABAMA | 2,968 | 2,280 | 571 | 117 | 549 | 535 | 1 | 13 |
| KENTUCKY | 2,175 | 1,566 | 355 | 254 | 454 | 445 | 3 | 6 |
| MISSISSIPPI | 1,859 | 1,527 | 308 | 24 | 191 | 185 | 2 | 4 |
| TENNESSEE | 3,888 | 3,025 | 303 | 560 | 1,890 | 1,400 | 399 | 91 |
| WEST SOUTH CENTRAL | 21,405 | 15,271 | 3,400 | 2,734 | 4,223 | 3,235 | 816 | 172 |
| ARKANSAS | 2,136 | 1,339 | 340 | 457 | 169 | 163 | 2 | 4 |
| LOUISIANA | 3,831 | 2,931 | 392 | 508 | 790 | 650 | 86 | 54 |
| OKLAHOMA | 2,422 | 1,806 | 318 | 298 | 315 | 309 | 5 | 1 |
| TEXAS | 13,016 | 9,195 | 2,350 | 1,471 | 2,949 | 2,113 | 723 | 113 |
| MOUNTAIN | 11,834 | 8,775 | 2,049 | 1,010 | 1,359 | 1,107 | 234 | 18 |
| ARIZONA | 2,576 | 1,848 | 454 | 274 | 79 | 74 | 0 | 5 |
| COLORADO | 3,846 | 3,258 | 421 | 167 | 523 | 363 | 151 | 9 |
| IDAHO | 864 | 589 | 139 | 136 | 125 | 124 | 1 | 0 |
| MONTANA | 808 | 676 | 124 | 8 | 73 | 71 | 0 | 2 |
| NEVADA | 608 | 430 | 138 | 40 | 0 | 0 | 0 | 0 |
| NEW MEXICO | 1,257 | 949 | 240 | 68 | 75 | 74 | 1 | 0 |
| UTAH | 1,365 | 711 | 424 | 230 | 484 | 401 | 81 | 2 |
| WYOMING | 510 | 314 | 109 | 87 | 0 | 0 | 0 | 0 |
| PACIFIC | 33,007 | 26,069 | 6,293 | 645 | 8,665 | 6,299 | 2,166 | 200 |
| ALASKA | 398 | 259 | 96 | 43 | 43 | 41 | 0 | 2 |
| CALIFORNIA | 23,262 | 19,501 | 3,548 | 213 | 7,770 | 5,438 | 2,153 | 179 |
| HAWAII | 1,184 | 785 | 266 | 133 | 53 | 51 | 0 | 2 |
| OREGON | 3,622 | 2,515 | 980 | 127 | 316 | 299 | 12 | 5 |
| WASHINGTON | 4,541 | 3,009 | 1,403 | 129 | 483 | 470 | 1 | 12 |
| OUTLYING AREAS | 1,882 | 1,471 | 297 | 114 | 569 | 566 | 1 | 2 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-35. GEOGRAPHIC DISTRIBUTION OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY CONTROL AND FUNCTION: JANUARY 1975

| DIVISION AND STATE | PUBLIC INSTITUTIONS | | | | PRIVATE INSTITUTIONS | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | TEACHING | R & D | OTHER | TOTAL | TEACHING | R & D | OTHER |
| UNITED STATES TOTAL | 167,704 | 129,230 | 26,358 | 12,116 | 71,508 | 52,294 | 16,841 | 2,373 |
| NEW ENGLAND | 6,838 | 5,690 | 723 | 425 | 12,512 | 8,606 | 3,708 | 198 |
| CONNECTICUT | 1,773 | 1,403 | 305 | 65 | 2,537 | 1,625 | 879 | 33 |
| MAINE | 659 | 452 | 159 | 48 | 221 | 214 | 2 | 5 |
| MASSACHUSETTS | 2,745 | 2,625 | 72 | 48 | 8,565 | 5,738 | 2,667 | 140 |
| NEW HAMPSHIRE | 403 | 336 | 29 | 38 | 409 | 340 | 64 | 3 |
| RHODE ISLAND | 649 | 463 | 90 | 96 | 533 | 429 | 95 | 9 |
| VERMONT | 609 | 411 | 68 | 130 | 267 | 260 | 1 | 6 |
| MIDDLE ATLANTIC | 22,559 | 19,514 | 2,316 | 729 | 18,932 | 14,535 | 3,876 | 521 |
| NEW JERSEY | 4,026 | 3,458 | 491 | 77 | 1,649 | 1,300 | 316 | 33 |
| NEW YORK | 11,848 | 10,421 | 1,005 | 422 | 11,481 | 7,983 | 3,099 | 399 |
| PENNSYLVANIA | 6,685 | 5,635 | 820 | 230 | 5,802 | 5,252 | 461 | 89 |
| EAST NORTH CENTRAL | 30,626 | 23,110 | 5,098 | 2,418 | 10,816 | 8,504 | 1,805 | 507 |
| ILLINOIS | 7,032 | 5,134 | 936 | 962 | 4,587 | 3,224 | 950 | 413 |
| INDIANA | 3,317 | 2,567 | 378 | 372 | 1,162 | 1,105 | 39 | 18 |
| MICHIGAN | 9,025 | 7,077 | 1,614 | 334 | 989 | 956 | 8 | 25 |
| OHIO | 6,333 | 4,950 | 729 | 654 | 2,965 | 2,231 | 719 | 15 |
| WISCONSIN | 4,919 | 3,382 | 1,441 | 96 | 1,113 | 988 | 89 | 36 |
| WEST NORTH CENTRAL | 15,452 | 11,523 | 2,689 | 1,240 | 4,983 | 3,576 | 1,081 | 326 |
| IOWA | 2,733 | 1,850 | 686 | 197 | 777 | 765 | 3 | 9 |
| KANSAS | 2,817 | 1,981 | 607 | 229 | 272 | 267 | 0 | 5 |
| MINNESOTA | 3,751 | 3,412 | 300 | 39 | 690 | 667 | 6 | 17 |
| MISSOURI | 3,148 | 2,348 | 548 | 252 | 2,643 | 1,341 | 1,055 | 244 |
| NEBRASKA | 1,482 | 965 | 230 | 287 | 448 | 386 | 17 | 45 |
| NORTH DAKOTA | 696 | 506 | 145 | 45 | 25 | 25 | 0 | 0 |
| SOUTH DAKOTA | 825 | 461 | 173 | 191 | 131 | 125 | 0 | 6 |
| SOUTH ATLANTIC | 20,368 | 20,086 | 4,166 | 2,116 | 10,305 | 6,785 | 3,114 | 406 |
| DELAWARE | 581 | 442 | 108 | 31 | 91 | 91 | 0 | 0 |
| DISTRICT OF COLUMBIA | 278 | 269 | 2 | 7 | 2,078 | 1,656 | 371 | 51 |
| FLORIDA | 5,043 | 3,719 | 1,051 | 273 | 1,151 | 772 | 304 | 75 |
| GEORGIA | 3,680 | 2,739 | 841 | 100 | 1,217 | 910 | 179 | 128 |
| MARYLAND | 3,692 | 2,811 | 505 | 376 | 2,200 | 618 | 1,548 | 34 |
| NORTH CAROLINA | 5,229 | 3,730 | 643 | 856 | 2,363 | 1,596 | 686 | 81 |
| SOUTH CAROLINA | 2,134 | 1,700 | 264 | 170 | 438 | 421 | 2 | 15 |
| VIRGINIA | 4,215 | 3,349 | 605 | 261 | 654 | 611 | 24 | 19 |
| WEST VIRGINIA | 1,516 | 1,327 | 147 | 42 | 195 | 192 | 0 | 3 |
| EAST SOUTH CENTRAL | 9,623 | 7,210 | 1,474 | 939 | 2,603 | 2,153 | 344 | 103 |
| ALABAMA | 2,567 | 1,916 | 542 | 109 | 492 | 479 | 1 | 12 |
| KENTUCKY | 2,000 | 1,412 | 334 | 254 | 352 | 345 | 3 | 4 |
| MISSISSIPPI | 1,784 | 1,455 | 307 | 22 | 164 | 159 | 2 | 3 |
| TENNESSEE | 3,272 | 2,427 | 291 | 554 | 1,592 | 1,170 | 338 | 84 |
| WEST SOUTH CENTRAL | 18,811 | 13,146 | 3,049 | 2,616 | 3,408 | 2,556 | 728 | 124 |
| ARKANSAS | 1,963 | 1,229 | 323 | 411 | 132 | 128 | 2 | 2 |
| LOUISIANA | 3,334 | 2,463 | 365 | 506 | 682 | 565 | 78 | 39 |
| OKLAHOMA | 2,048 | 1,492 | 279 | 277 | 263 | 257 | 5 | 1 |
| TEXAS | 11,466 | 7,962 | 2,082 | 1,422 | 2,331 | 1,606 | 643 | 82 |
| MOUNTAIN | 10,579 | 7,717 | 1,939 | 923 | 1,151 | 909 | 224 | 18 |
| ARIZONA | 2,163 | 1,490 | 416 | 257 | 74 | 69 | 0 | 5 |
| COLORADO | 3,466 | 2,940 | 406 | 120 | 459 | 307 | 143 | 9 |
| IDAHO | 797 | 524 | 137 | 136 | 106 | 105 | 1 | 0 |
| MONTANA | 755 | 628 | 121 | 6 | 49 | 47 | 0 | 2 |
| NEVADA | 478 | 317 | 129 | 32 | 0 | 0 | 0 | 0 |
| NEW MEXICO | 1,148 | 853 | 232 | 63 | 43 | 42 | 1 | 0 |
| UTAH | 1,284 | 672 | 389 | 223 | 420 | 339 | 79 | 2 |
| WYOMING | 488 | 293 | 109 | 86 | 0 | 0 | 0 | 0 |
| PACIFIC | 25,163 | 19,897 | 4,663 | 603 | 6,301 | 4,173 | 1,960 | 168 |
| ALASKA | 382 | 248 | 92 | 42 | 42 | 40 | 0 | 2 |
| CALIFORNIA | 17,061 | 14,525 | 2,339 | 197 | 5,542 | 3,445 | 1,949 | 148 |
| HAWAII | 989 | 624 | 248 | 117 | 44 | 42 | 0 | 2 |
| OREGON | 2,704 | 1,837 | 746 | 121 | 264 | 250 | 10 | 4 |
| WASHINGTON | 4,027 | 2,663 | 1,238 | 126 | 409 | 396 | 1 | 12 |
| OUTLYING AREAS | 1,685 | 1,337 | 241 | 107 | 500 | 497 | 1 | 2 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-36. GEOGRAPHIC DISTRIBUTION OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY TYPE OF INSTITUTION: JANUARY 1975

| DIVISION AND STATE | TOTAL | INSTITUTIONS GRANTING: DOCTORATE IN S & E | MASTER'S IN S & E | BACHELOR'S IN S & E | OTHER DEGREES | 2-YEAR INSTITUTIONS |
|---|---|---|---|---|---|---|
| UNITED STATES TOTAL | 297,193 | 188,484 | 37,510 | 30,923 | 1,505 | 38,771 |
| NEW ENGLAND | 24,725 | 17,367 | 2,791 | 2,452 | 282 | 1,833 |
| CONNECTICUT | 5,418 | 3,139 | 1,476 | 330 | 7 | 466 |
| MAINE | 1,012 | 513 | 0 | 385 | 44 | 70 |
| MASSACHUSETTS | 14,957 | 11,422 | 969 | 1,356 | 115 | 1,095 |
| NEW HAMPSHIRE | 964 | 740 | 22 | 167 | 0 | 35 |
| RHODE ISLAND | 1,317 | 937 | 174 | 57 | 44 | 105 |
| VERMONT | 1,057 | 616 | 150 | 157 | 72 | 62 |
| MIDDLE ATLANTIC | 55,658 | 32,401 | 8,774 | 6,472 | 368 | 7,643 |
| NEW JERSEY | 7,470 | 4,436 | 807 | 1,090 | 0 | 1,137 |
| NEW YORK | 31,600 | 16,928 | 6,149 | 2,868 | 182 | 5,473 |
| PENNSYLVANIA | 16,588 | 11,037 | 1,818 | 2,514 | 186 | 1,033 |
| EAST NORTH CENTRAL | 52,201 | 35,338 | 5,232 | 5,352 | 284 | 5,995 |
| ILLINOIS | 14,741 | 9,397 | 1,641 | 1,016 | 94 | 2,593 |
| INDIANA | 5,378 | 3,942 | 409 | 906 | 13 | 108 |
| MICHIGAN | 12,722 | 8,822 | 647 | 1,404 | 44 | 1,805 |
| OHIO | 11,764 | 8,233 | 1,203 | 1,281 | 40 | 1,007 |
| WISCONSIN | 7,596 | 4,944 | 1,332 | 745 | 93 | 482 |
| WEST NORTH CENTRAL | 23,498 | 16,288 | 2,448 | 2,814 | 94 | 1,854 |
| IOWA | 3,880 | 2,586 | 300 | 623 | 0 | 371 |
| KANSAS | 3,417 | 2,401 | 240 | 380 | 0 | 396 |
| MINNESOTA | 5,301 | 3,382 | 734 | 676 | 31 | 478 |
| MISSOURI | 6,901 | 4,997 | 913 | 565 | 49 | 377 |
| NEBRASKA | 2,182 | 1,566 | 261 | 246 | 14 | 95 |
| NORTH DAKOTA | 757 | 542 | 0 | 107 | 0 | 108 |
| SOUTH DAKOTA | 1,060 | 814 | 0 | 217 | 0 | 29 |
| SOUTH ATLANTIC | 44,193 | 27,301 | 4,061 | 5,597 | 105 | 7,129 |
| DELAWARE | 625 | 461 | 0 | 66 | 0 | 98 |
| DISTRICT OF COLUMBIA | 3,947 | 3,293 | 194 | 96 | 0 | 364 |
| FLORIDA | 7,277 | 4,154 | 605 | 571 | 0 | 1,947 |
| GEORGIA | 5,565 | 3,622 | 403 | 907 | 0 | 633 |
| MARYLAND | 7,402 | 4,332 | 569 | 1,092 | 64 | 1,345 |
| NORTH CAROLINA | 8,258 | 5,059 | 1,089 | 1,013 | 41 | 1,056 |
| SOUTH CAROLINA | 3,368 | 2,058 | 255 | 581 | 0 | 474 |
| VIRGINIA | 5,804 | 3,223 | 789 | 664 | 0 | 1,128 |
| WEST VIRGINIA | 1,947 | 1,099 | 157 | 607 | 0 | 84 |
| EAST SOUTH CENTRAL | 13,974 | 8,225 | 2,273 | 1,976 | 34 | 1,466 |
| ALABAMA | 3,517 | 1,917 | 492 | 582 | 25 | 501 |
| KENTUCKY | 2,629 | 1,503 | 637 | 455 | 0 | 34 |
| MISSISSIPPI | 2,050 | 1,125 | 275 | 203 | 0 | 447 |
| TENNESSEE | 5,778 | 3,680 | 869 | 736 | 9 | 484 |
| WEST SOUTH CENTRAL | 25,628 | 18,085 | 2,415 | 2,336 | 4 | 2,788 |
| ARKANSAS | 2,305 | 1,510 | 253 | 483 | 0 | 59 |
| LOUISIANA | 4,621 | 3,570 | 456 | 385 | 0 | 210 |
| OKLAHOMA | 2,737 | 1,567 | 41 | 690 | 0 | 439 |
| TEXAS | 15,965 | 11,438 | 1,665 | 778 | 4 | 2,080 |
| MOUNTAIN | 13,193 | 9,531 | 363 | 1,848 | 74 | 1,377 |
| ARIZONA | 2,655 | 2,145 | 0 | 65 | 0 | 445 |
| COLORADO | 4,369 | 2,663 | 45 | 1,107 | 74 | 480 |
| IDAHO | 989 | 651 | 0 | 212 | 0 | 126 |
| MONTANA | 881 | 612 | 75 | 137 | 0 | 57 |
| NEVADA | 608 | 457 | 105 | 0 | 0 | 46 |
| NEW MEXICO | 1,332 | 1,067 | 138 | 101 | 0 | 26 |
| UTAH | 1,849 | 1,562 | 0 | 226 | 0 | 61 |
| WYOMING | 510 | 374 | 0 | 0 | 0 | 136 |
| PACIFIC | 41,672 | 23,074 | 8,080 | 1,758 | 260 | 8,500 |
| ALASKA | 441 | 398 | 0 | 28 | 0 | 15 |
| CALIFORNIA | 31,032 | 15,927 | 6,973 | 1,122 | 52 | 6,958 |
| HAWAII | 1,237 | 1,142 | 0 | 53 | 0 | 42 |
| OREGON | 3,938 | 2,416 | 360 | 243 | 208 | 711 |
| WASHINGTON | 5,024 | 3,191 | 747 | 312 | 0 | 774 |
| OUTLYING AREAS | 2,451 | 874 | 1,073 | 318 | 0 | 186 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-37. GEOGRAPHIC DISTRIBUTION OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY TYPE OF INSTITUTION: JANUARY 1975

| DIVISION AND STATE | TOTAL | INSTITUTIONS GRANTING: DOCTORATE IN S & E | MASTER'S IN S & E | BACHELOR'S IN S & E | OTHER DEGREES | 2-YEAR INSTITUTIONS |
|---|---|---|---|---|---|---|
| UNITED STATES TOTAL | 239,212 | 154,922 | 30,675 | 25,784 | 951 | 26,880 |
| NEW ENGLAND | 19,350 | 13,418 | 2,140 | 2,082 | 230 | 1,460 |
| CONNECTICUT | 4,310 | 2,758 | 983 | 250 | 7 | 312 |
| MAINE | 880 | 468 | 0 | 350 | 40 | 22 |
| MASSACHUSETTS | 11,290 | 8,214 | 877 | 1,173 | 96 | 930 |
| NEW HAMPSHIRE | 812 | 649 | 14 | 118 | 0 | 31 |
| RHODE ISLAND | 1,182 | 847 | 144 | 43 | 44 | 104 |
| VERMONT | 876 | 482 | 122 | 148 | 63 | 61 |
| MIDDLE ATLANTIC | 41,491 | 24,528 | 6,894 | 5,011 | 182 | 4,876 |
| NEW JERSEY | 5,675 | 3,443 | 723 | 720 | 0 | 789 |
| NEW YORK | 23,329 | 13,157 | 4,426 | 2,207 | 104 | 3,435 |
| PENNSYLVANIA | 12,487 | 7,928 | 1,745 | 2,084 | 78 | 652 |
| EAST NORTH CENTRAL | 41,442 | 28,565 | 4,351 | 4,284 | 219 | 4,023 |
| ILLINOIS | 11,619 | 7,630 | 1,351 | 791 | 73 | 1,774 |
| INDIANA | 4,479 | 3,411 | 333 | 662 | 13 | 60 |
| MICHIGAN | 10,014 | 7,157 | 583 | 1,075 | 42 | 1,157 |
| OHIO | 9,298 | 6,692 | 907 | 1,100 | 14 | 585 |
| WISCONSIN | 6,032 | 3,675 | 1,177 | 656 | 77 | 447 |
| WEST NORTH CENTRAL | 20,435 | 14,085 | 2,291 | 2,412 | 82 | 1,565 |
| IOWA | 3,510 | 2,362 | 265 | 546 | 0 | 337 |
| KANSAS | 3,089 | 2,233 | 215 | 303 | 0 | 338 |
| MINNESOTA | 4,441 | 2,782 | 689 | 572 | 31 | 367 |
| MISSOURI | 5,788 | 4,073 | 877 | 472 | 42 | 324 |
| NEBRASKA | 1,930 | 1,380 | 245 | 215 | 9 | 81 |
| NORTH DAKOTA | 721 | 515 | 0 | 105 | 0 | 101 |
| SOUTH DAKOTA | 956 | 740 | 0 | 199 | 0 | 17 |
| SOUTH ATLANTIC | 36,673 | 23,247 | 3,498 | 5,054 | 83 | 4,791 |
| DELAWARE | 590 | 433 | 0 | 66 | 0 | 91 |
| DISTRICT OF COLUMBIA | 2,356 | 2,026 | 139 | 76 | 0 | 115 |
| FLORIDA | 6,194 | 3,719 | 536 | 514 | 0 | 1,425 |
| GEORGIA | 4,897 | 3,214 | 382 | 816 | 0 | 485 |
| MARYLAND | 5,892 | 3,683 | 465 | 978 | 49 | 717 |
| NORTH CAROLINA | 7,592 | 4,831 | 942 | 932 | 34 | 853 |
| SOUTH CAROLINA | 2,572 | 1,523 | 233 | 523 | 0 | 293 |
| VIRGINIA | 4,869 | 2,859 | 669 | 598 | 0 | 743 |
| WEST VIRGINIA | 1,711 | 959 | 132 | 551 | 0 | 69 |
| EAST SOUTH CENTRAL | 12,223 | 7,337 | 2,056 | 1,722 | 26 | 1,082 |
| ALABAMA | 3,059 | 1,749 | 470 | 515 | 19 | 306 |
| KENTUCKY | 2,352 | 1,343 | 603 | 375 | 0 | 31 |
| MISSISSIPPI | 1,948 | 1,095 | 241 | 190 | 0 | 422 |
| TENNESSEE | 4,864 | 3,130 | 742 | 642 | 7 | 323 |
| WEST SOUTH CENTRAL | 22,219 | 16,054 | 2,229 | 1,947 | 2 | 1,987 |
| ARKANSAS | 2,095 | 1,383 | 252 | 410 | 0 | 50 |
| LOUISIANA | 4,016 | 3,101 | 449 | 332 | 0 | 134 |
| OKLAHOMA | 2,311 | 1,348 | 41 | 642 | 0 | 280 |
| TEXAS | 13,797 | 10,222 | 1,487 | 563 | 2 | 1,523 |
| MOUNTAIN | 11,730 | 8,755 | 351 | 1,637 | 57 | 930 |
| ARIZONA | 2,237 | 1,907 | 0 | 60 | 0 | 270 |
| COLORADO | 3,925 | 2,510 | 45 | 1,014 | 57 | 299 |
| IDAHO | 903 | 628 | 0 | 163 | 0 | 112 |
| MONTANA | 804 | 584 | 73 | 112 | 0 | 35 |
| NEVADA | 478 | 354 | 105 | 0 | 0 | 19 |
| NEW MEXICO | 1,191 | 974 | 128 | 68 | 0 | 21 |
| UTAH | 1,704 | 1,430 | 0 | 220 | 0 | 54 |
| WYOMING | 488 | 368 | 0 | 0 | 0 | 120 |
| PACIFIC | 31,464 | 18,204 | 5,805 | 1,415 | 50 | 5,990 |
| ALASKA | 424 | 382 | 0 | 28 | 0 | 14 |
| CALIFORNIA | 22,603 | 11,991 | 4,802 | 849 | 50 | 4,911 |
| HAWAII | 1,033 | 972 | 0 | 44 | 0 | 17 |
| OREGON | 2,968 | 2,000 | 311 | 219 | 0 | 438 |
| WASHINGTON | 4,436 | 2,859 | 692 | 275 | 0 | 610 |
| OUTLYING AREAS | 2,185 | 729 | 1,060 | 220 | 0 | 176 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-38. GEOGRAPHIC DISTRIBUTION OF SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY LEVEL OF EDUCATIONAL ATTAINMENT: JANUARY 1973

| DIVISION AND STATE | TOTAL | LEVEL OF ATTAINMENT | | | |
|---|---|---|---|---|---|
| | | PH.D. OR SC.D. | M.D., D.D.S., ETC. | MASTER'S | BACHELOR'S |
| UNITED STATES TOTAL | 297,193 | 146,341 | 44,896 | 80,545 | 25,411 |
| NEW ENGLAND | 24,725 | 12,382 | 4,733 | 5,480 | 2,130 |
| CONNECTICUT | 5,418 | 2,565 | 637 | 1,437 | 779 |
| MAINE | 1,012 | 619 | 13 | 306 | 74 |
| MASSACHUSETTS | 14,957 | 7,274 | 3,739 | 2,911 | 1,033 |
| NEW HAMPSHIRE | 964 | 589 | 82 | 234 | 59 |
| RHODE ISLAND | 1,317 | 898 | 42 | 317 | 60 |
| VERMONT | 1,057 | 437 | 220 | 275 | 125 |
| MIDDLE ATLANTIC | 55,658 | 27,081 | 9,736 | 15,174 | 3,669 |
| NEW JERSEY | 7,470 | 3,724 | 797 | 2,459 | 490 |
| NEW YORK | 31,600 | 15,596 | 5,428 | 8,501 | 2,075 |
| PENNSYLVANIA | 16,588 | 7,761 | 3,509 | 4,214 | 1,104 |
| EAST NORTH CENTRAL | 52,201 | 26,354 | 8,030 | 13,208 | 4,609 |
| ILLINOIS | 14,741 | 6,996 | 2,454 | 3,957 | 1,334 |
| INDIANA | 5,378 | 3,453 | 454 | 1,157 | 314 |
| MICHIGAN | 12,722 | 5,556 | 1,785 | 3,737 | 1,644 |
| OHIO | 11,764 | 5,847 | 2,230 | 2,740 | 947 |
| WISCONSIN | 7,596 | 4,502 | 1,107 | 1,617 | 370 |
| WEST NORTH CENTRAL | 23,498 | 11,549 | 4,214 | 6,089 | 1,646 |
| IOWA | 3,880 | 2,091 | 511 | 1,051 | 227 |
| KANSAS | 3,417 | 1,876 | 294 | 1,036 | 211 |
| MINNESOTA | 5,301 | 2,603 | 758 | 1,549 | 391 |
| MISSOURI | 6,901 | 3,100 | 2,212 | 1,299 | 290 |
| NEBRASKA | 2,182 | 1,031 | 406 | 530 | 215 |
| NORTH DAKOTA | 757 | 384 | 151 | 262 | 96 |
| SOUTH DAKOTA | 1,060 | 464 | 18 | 362 | 216 |
| SOUTH ATLANTIC | 44,193 | 21,125 | 6,775 | 12,537 | 3,756 |
| DELAWARE | 625 | 445 | 7 | 122 | 51 |
| DISTRICT OF COLUMBIA | 3,947 | 1,702 | 1,109 | 933 | 203 |
| FLORIDA | 7,277 | 3,524 | 759 | 2,478 | 516 |
| GEORGIA | 5,565 | 2,926 | 752 | 1,542 | 345 |
| MARYLAND | 7,402 | 3,157 | 1,500 | 2,043 | 702 |
| NORTH CAROLINA | 8,258 | 3,934 | 982 | 2,244 | 1,098 |
| SOUTH CAROLINA | 3,368 | 1,502 | 764 | 775 | 327 |
| VIRGINIA | 5,804 | 3,094 | 546 | 1,756 | 408 |
| WEST VIRGINIA | 1,947 | 841 | 356 | 644 | 106 |
| EAST SOUTH CENTRAL | 13,974 | 7,037 | 1,964 | 4,103 | 870 |
| ALABAMA | 3,517 | 1,795 | 500 | 1,129 | 93 |
| KENTUCKY | 2,629 | 1,503 | 551 | 527 | 48 |
| MISSISSIPPI | 2,050 | 977 | 156 | 814 | 103 |
| TENNESSEE | 5,778 | 2,762 | 757 | 1,633 | 626 |
| WEST SOUTH CENTRAL | 25,628 | 11,827 | 3,103 | 6,824 | 3,874 |
| ARKANSAS | 2,305 | 880 | 349 | 748 | 328 |
| LOUISIANA | 4,621 | 2,196 | 874 | 1,218 | 333 |
| OKLAHOMA | 2,737 | 1,460 | 83 | 976 | 218 |
| TEXAS | 15,965 | 7,291 | 1,797 | 3,882 | 2,995 |
| MOUNTAIN | 13,193 | 7,750 | 1,109 | 3,479 | 855 |
| ARIZONA | 2,655 | 1,519 | 232 | 686 | 218 |
| COLORADO | 4,369 | 2,376 | 366 | 1,336 | 291 |
| IDAHO | 989 | 514 | 17 | 335 | 123 |
| MONTANA | 881 | 564 | 111 | 258 | 48 |
| NEVADA | 608 | 382 | 106 | 102 | 18 |
| NEW MEXICO | 1,332 | 835 | 179 | 266 | 52 |
| UTAH | 1,849 | 1,240 | 192 | 334 | 83 |
| WYOMING | 510 | 320 | 6 | 162 | 22 |
| PACIFIC | 41,672 | 20,091 | 5,080 | 12,723 | 3,778 |
| ALASKA | 441 | 254 | 59 | 86 | 42 |
| CALIFORNIA | 31,032 | 14,444 | 4,001 | 9,815 | 2,772 |
| HAWAII | 1,237 | 770 | 122 | 276 | 69 |
| OREGON | 3,938 | 1,893 | 384 | 1,187 | 474 |
| WASHINGTON | 5,024 | 2,730 | 514 | 1,359 | 421 |
| OUTLYING AREAS | 2,451 | 1,145 | 154 | 928 | 224 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-39. GEOGRAPHIC DISTRIBUTION OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY LEVEL OF EDUCATIONAL ATTAINMENT: JANUARY 1975

| DIVISION AND STATE | TOTAL | LEVEL OF ATTAINMENT | | | |
|---|---|---|---|---|---|
| | | PH.D. OR SC.D. | M.D., D.D.S., ETC. | MASTER'S | BACHELOR'S |
| UNITED STATES TOTAL | 239,212 | 131,890 | 29,604 | 59,576 | 18,142 |
| NEW ENGLAND | 19,350 | 11,048 | 2,759 | 3,913 | 1,630 |
| CONNECTICUT | 4,310 | 2,290 | 541 | 899 | 580 |
| MAINE | 880 | 576 | 31 | 247 | 54 |
| MASSACHUSETTS | 11,290 | 6,432 | 1,980 | 2,103 | 805 |
| NEW HAMPSHIRE | 812 | 532 | 72 | 179 | 29 |
| RHODE ISLAND | 1,182 | 840 | 35 | 258 | 49 |
| VERMONT | 876 | 408 | 128 | 227 | 113 |
| MIDDLE ATLANTIC | 41,491 | 23,798 | 5,490 | 9,963 | 2,240 |
| NEW JERSEY | 5,675 | 3,296 | 502 | 1,549 | 328 |
| NEW YORK | 23,329 | 13,572 | 3,448 | 5,186 | 1,123 |
| PENNSYLVANIA | 12,487 | 6,930 | 1,540 | 3,228 | 789 |
| EAST NORTH CENTRAL | 41,442 | 23,347 | 5,395 | 9,464 | 3,236 |
| ILLINOIS | 11,619 | 6,390 | 1,507 | 2,790 | 932 |
| INDIANA | 4,479 | 3,191 | 273 | 831 | 184 |
| MICHIGAN | 10,014 | 5,056 | 1,184 | 2,564 | 1,210 |
| OHIO | 9,298 | 5,032 | 1,644 | 1,984 | 638 |
| WISCONSIN | 6,032 | 3,678 | 787 | 1,295 | 272 |
| WEST NORTH CENTRAL | 20,435 | 10,965 | 3,041 | 5,136 | 1,293 |
| IOWA | 3,510 | 2,005 | 421 | 895 | 189 |
| KANSAS | 3,089 | 1,763 | 275 | 873 | 178 |
| MINNESOTA | 4,441 | 2,471 | 507 | 1,213 | 250 |
| MISSOURI | 5,788 | 2,945 | 1,524 | 1,107 | 212 |
| NEBRASKA | 1,930 | 980 | 286 | 478 | 186 |
| NORTH DAKOTA | 721 | 373 | 111 | 247 | 90 |
| SOUTH DAKOTA | 956 | 428 | 171 | 323 | 188 |
| SOUTH ATLANTIC | 36,673 | 19,290 | 4,977 | 9,560 | 2,846 |
| DELAWARE | 590 | 432 | 61 | 104 | 48 |
| DISTRICT OF COLUMBIA | 2,356 | 1,249 | 591 | 429 | 87 |
| FLORIDA | 6,194 | 3,280 | 676 | 1,898 | 340 |
| GEORGIA | 4,897 | 2,776 | 572 | 1,257 | 292 |
| MARYLAND | 5,892 | 2,747 | 1,214 | 1,415 | 516 |
| NORTH CAROLINA | 7,592 | 3,743 | 940 | 1,924 | 985 |
| SOUTH CAROLINA | 2,572 | 1,438 | 257 | 648 | 229 |
| VIRGINIA | 4,869 | 2,838 | 394 | 1,360 | 277 |
| WEST VIRGINIA | 1,711 | 787 | 327 | 525 | 72 |
| EAST SOUTH CENTRAL | 12,223 | 6,599 | 1,598 | 3,355 | 671 |
| ALABAMA | 3,059 | 1,697 | 440 | 860 | 62 |
| KENTUCKY | 2,352 | 1,459 | 433 | 438 | 22 |
| MISSISSIPPI | 1,948 | 937 | 142 | 768 | 101 |
| TENNESSEE | 4,864 | 2,506 | 583 | 1,289 | 486 |
| WEST SOUTH CENTRAL | 22,219 | 11,122 | 2,183 | 5,650 | 3,264 |
| ARKANSAS | 2,095 | 836 | 294 | 662 | 303 |
| LOUISIANA | 4,016 | 2,151 | 517 | 1,068 | 280 |
| OKLAHOMA | 2,311 | 1,346 | 64 | 792 | 109 |
| TEXAS | 13,797 | 6,789 | 1,308 | 3,128 | 2,572 |
| MOUNTAIN | 11,730 | 7,394 | 775 | 2,838 | 723 |
| ARIZONA | 2,237 | 1,439 | 139 | 475 | 184 |
| COLORADO | 3,925 | 2,266 | 294 | 1,130 | 235 |
| IDAHO | 903 | 502 | 81 | 280 | 113 |
| MONTANA | 804 | 542 | 21 | 220 | 40 |
| NEVADA | 478 | 376 | 21 | 66 | 15 |
| NEW MEXICO | 1,191 | 780 | 152 | 210 | 49 |
| UTAH | 1,704 | 1,171 | 157 | 307 | 69 |
| WYOMING | 488 | 318 | 21 | 150 | 18 |
| PACIFIC | 31,464 | 17,265 | 3,283 | 8,871 | 2,045 |
| ALASKA | 424 | 248 | 53 | 83 | 40 |
| CALIFORNIA | 22,603 | 12,135 | 2,535 | 6,644 | 1,289 |
| HAWAII | 1,033 | 727 | 58 | 203 | 45 |
| OREGON | 2,968 | 1,584 | 236 | 816 | 332 |
| WASHINGTON | 4,436 | 2,571 | 401 | 1,125 | 339 |
| OUTLYING AREAS | 2,185 | 1,062 | 103 | 826 | 194 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-40. GEOGRAPHIC DISTRIBUTION OF FULL-TIME SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY SEX: JANUARY 1975

| DIVISION AND STATE | TOTAL | MEN | | | WOMEN | | |
|---|---|---|---|---|---|---|---|
| | | NUMBER | PERCENT DISTRIBUTION | PERCENT OF TOTAL | NUMBER | PERCENT DISTRIBUTION | PERCENT OF TOTAL |
| UNITED STATES TOTAL | 239,212 | 202,562 | 100.0 | 84.7 | 36,650 | 100.0 | 15.3 |
| NEW ENGLAND | 19,350 | 16,270 | 8.0 | 84.1 | 3,080 | 8.4 | 15.9 |
| CONNECTICUT | 4,310 | 3,372 | 1.7 | 78.2 | 938 | 2.6 | 21.8 |
| MAINE | 880 | 799 | .4 | 90.8 | 81 | .2 | 9.2 |
| MASSACHUSETTS | 11,290 | 9,594 | 4.7 | 85.0 | 1,696 | 4.6 | 15.0 |
| NEW HAMPSHIRE | 812 | 712 | .4 | 87.7 | 100 | .3 | 12.3 |
| RHODE ISLAND | 1,162 | 1,054 | .5 | 89.2 | 128 | .3 | 10.8 |
| VERMONT | 876 | 739 | .4 | 84.4 | 137 | .4 | 15.6 |
| MIDDLE ATLANTIC | 41,491 | 34,791 | 17.2 | 83.9 | 6,700 | 18.3 | 16.1 |
| NEW JERSEY | 5,675 | 4,660 | 2.3 | 82.1 | 1,015 | 2.8 | 17.9 |
| NEW YORK | 23,329 | 19,582 | 9.7 | 83.9 | 3,747 | 10.2 | 16.1 |
| PENNSYLVANIA | 12,487 | 10,549 | 5.2 | 84.5 | 1,938 | 5.3 | 15.5 |
| EAST NORTH CENTRAL | 41,442 | 34,794 | 17.2 | 84.0 | 6,648 | 18.1 | 16.0 |
| ILLINOIS | 11,619 | 9,752 | 4.8 | 83.9 | 1,867 | 5.1 | 16.1 |
| INDIANA | 4,479 | 3,922 | 1.9 | 87.6 | 557 | 1.5 | 12.4 |
| MICHIGAN | 10,014 | 8,296 | 4.1 | 82.8 | 1,718 | 4.7 | 17.2 |
| OHIO | 9,298 | 7,872 | 3.9 | 84.7 | 1,426 | 3.9 | 15.3 |
| WISCONSIN | 6,032 | 4,952 | 2.4 | 82.1 | 1,080 | 2.9 | 17.9 |
| WEST NORTH CENTRAL | 20,435 | 17,615 | 8.7 | 86.2 | 2,820 | 7.7 | 13.8 |
| IOWA | 3,510 | 3,123 | 1.5 | 89.0 | 387 | 1.1 | 11.0 |
| KANSAS | 3,089 | 2,566 | 1.3 | 83.1 | 523 | 1.4 | 16.9 |
| MINNESOTA | 4,441 | 3,746 | 1.8 | 84.4 | 695 | 1.9 | 15.6 |
| MISSOURI | 5,788 | 5,045 | 2.5 | 87.2 | 743 | 2.0 | 12.8 |
| NEBRASKA | 1,930 | 1,668 | .8 | 86.4 | 262 | .7 | 13.6 |
| NORTH DAKOTA | 721 | 664 | .3 | 92.1 | 57 | .2 | 7.9 |
| SOUTH DAKOTA | 956 | 803 | .4 | 84.0 | 153 | .4 | 16.0 |
| SOUTH ATLANTIC | 36,673 | 31,225 | 15.4 | [illegible] | 5,448 | 14.9 | 14.9 |
| DELAWARE | 590 | 514 | .3 | [illegible] | 76 | .2 | 12.9 |
| DISTRICT OF COLUMBIA | 2,356 | 1,923 | .9 | 81.6 | 433 | 1.2 | 18.4 |
| FLORIDA | 6,194 | 5,362 | 2.6 | 86.6 | 832 | 2.3 | 13.4 |
| GEORGIA | 4,897 | 4,246 | 2.1 | 86.7 | 651 | 1.8 | 13.3 |
| MARYLAND | 5,892 | 4,940 | 2.4 | 83.8 | 952 | 2.6 | 16.2 |
| NORTH CAROLINA | 7,592 | 6,231 | 3.1 | 82.1 | 1,361 | 3.7 | 17.9 |
| SOUTH CAROLINA | 2,572 | 2,330 | 1.2 | 90.6 | 242 | .7 | 9.4 |
| VIRGINIA | 4,869 | 4,177 | 2.1 | 85.8 | 692 | 1.9 | 14.2 |
| WEST VIRGINIA | 1,711 | 1,502 | .7 | 87.8 | 209 | .6 | 12.2 |
| EAST SOUTH CENTRAL | 12,223 | 10,360 | 5.1 | 84.8 | 1,863 | 5.1 | 15.2 |
| ALABAMA | 3,059 | 2,598 | 1.3 | 84.9 | 461 | 1.3 | 15.1 |
| KENTUCKY | 2,352 | 2,104 | 1.0 | 89.5 | 248 | .7 | 10.5 |
| MISSISSIPPI | 1,948 | 1,636 | .8 | 84.0 | 312 | .9 | 16.0 |
| TENNESSEE | 4,864 | 4,022 | 2.0 | 82.7 | 842 | 2.3 | 17.3 |
| WEST SOUTH CENTRAL | 22,219 | 18,304 | 9.0 | 82.4 | 3,915 | 10.7 | 17.6 |
| ARKANSAS | 2,095 | 1,752 | .9 | 83.6 | 343 | .9 | 16.4 |
| LOUISIANA | 4,016 | 3,332 | 1.6 | 83.0 | 684 | 1.9 | 17.0 |
| OKLAHOMA | 2,311 | 2,071 | 1.0 | 89.6 | 240 | .7 | 10.4 |
| TEXAS | 13,797 | 11,149 | 5.5 | 80.8 | 2,648 | 7.2 | 19.2 |
| MOUNTAIN | 11,730 | 10,698 | 5.3 | 91.2 | 1,032 | 2.8 | 8.8 |
| ARIZONA | 2,237 | 2,060 | 1.0 | 92.1 | 177 | .5 | 7.9 |
| COLORADO | 3,925 | 3,518 | 1.7 | 89.6 | 407 | 1.1 | 10.4 |
| IDAHO | 903 | 792 | .4 | 87.7 | 111 | .3 | 12.3 |
| MONTANA | 804 | 738 | .4 | 91.8 | 66 | .2 | 8.2 |
| NEVADA | 478 | 448 | .2 | 93.7 | 30 | .1 | 6.3 |
| NEW MEXICO | 1,191 | 1,077 | .5 | 90.4 | 114 | .3 | 9.6 |
| UTAH | 1,704 | 1,624 | .8 | 95.3 | 80 | .2 | 4.7 |
| WYOMING | 488 | 441 | .2 | 90.4 | 47 | .1 | 9.6 |
| PACIFIC | 31,464 | 26,719 | 13.2 | 84.9 | 4,745 | 12.9 | 15.1 |
| ALASKA | 424 | 356 | .2 | 84.0 | 68 | .2 | 16.0 |
| CALIFORNIA | 22,603 | 19,379 | 9.6 | 85.7 | 3,224 | 8.8 | 14.3 |
| HAWAII | 1,033 | 885 | .4 | 85.7 | 148 | .4 | 14.3 |
| OREGON | 2,968 | 2,531 | 1.2 | 85.3 | 437 | 1.2 | 14.7 |
| WASHINGTON | 4,436 | 3,568 | 1.8 | 80.4 | 868 | 2.4 | 19.6 |
| OUTLYING AREAS | 2,185 | 1,786 | .9 | 81.7 | 399 | 1.1 | 18.3 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-41. NUMBER OF R&D SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT, CONTROL, AND EMPLOYMENT STATUS: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | PRIVATE | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL-TIME | PART-TIME | TOTAL | FULL-TIME | PART-TIME |
| TOTAL | 30,786 | 26,358 | 4,428 | 18,819 | 16,841 | 1,978 |
| ENGINEERS (TOTAL) | 2,878 | 2,362 | 516 | 1,932 | 1,685 | 247 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 84 | 70 | 14 | 200 | 176 | 24 |
| (2) CHEMICAL ENGINEERS | 178 | 138 | 40 | 148 | 129 | 19 |
| (3) CIVIL ENGINEERS | 390 | 322 | 68 | 131 | 112 | 19 |
| (4) ELECTRICAL ENGINEERS | 480 | 414 | 66 | 574 | 496 | 78 |
| (5) MECHANICAL ENGINEERS | 360 | 288 | 72 | 269 | 242 | 27 |
| (6) OTHER ENGINEERS | 1,386 | 1,130 | 256 | 610 | 530 | 80 |
| PHYSICAL SCIENTISTS (TOTAL) | 3,667 | 3,105 | 562 | 2,589 | 2,402 | 187 |
| (1) CHEMISTS | 1,623 | 1,308 | 315 | 1,270 | 1,164 | 106 |
| (2) PHYSICISTS | 1,333 | 1,177 | 156 | 1,099 | 1,038 | 61 |
| (3) OTHER PHYSICAL SCIENTISTS | 711 | 620 | 91 | 220 | 200 | 20 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 1,353 | 1,162 | 191 | 526 | 487 | 39 |
| (1) EARTH SCIENTISTS | 652 | 554 | 98 | 276 | 251 | 25 |
| (2) ATMOSPHERIC SCIENTISTS | 203 | 167 | 36 | 63 | 55 | 8 |
| (3) OCEANOGRAPHERS | 498 | 441 | 57 | 187 | 181 | 6 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 929 | 817 | 112 | 608 | 551 | 57 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 445 | 393 | 52 | 361 | 326 | 35 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 484 | 424 | 60 | 247 | 225 | 22 |
| LIFE SCIENTISTS (TOTAL) | 10,177 | 15,838 | 2,339 | 11,686 | 10,509 | 1,177 |
| (1) AGRICULTURAL SCIENTISTS | 4,192 | 3,884 | 308 | 105 | 105 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 6,205 | 5,523 | 682 | 4,303 | 3,947 | 356 |
| (3) MEDICAL SCIENTISTS | 7,780 | 6,431 | 1,349 | 7,278 | 6,457 | 821 |
| PSYCHOLOGISTS (TOTAL) | 958 | 723 | 235 | 498 | 408 | 90 |
| SOCIAL SCIENTISTS (TOTAL) | 2,824 | 2,351 | 473 | 980 | 799 | 181 |
| (1) ECONOMISTS | 1,053 | 949 | 104 | 183 | 155 | 28 |
| (2) SOCIOLOGISTS | 472 | 391 | 81 | 236 | 197 | 39 |
| (3) POLITICAL SCIENTISTS | 328 | 252 | 76 | 156 | 120 | 36 |
| (4) HISTORIANS | 191 | 167 | 24 | 81 | 69 | 12 |
| (5) OTHER SOCIAL SCIENTISTS | 780 | 592 | 188 | 324 | 258 | 66 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-42. NUMBER OF R&D SCIENTISTS AND ENGINEERS EMPLOYED IN INSTITUTIONS AWARDING DOCTORATE DEGREES IN THE SCIENCES AND ENGINEERING, BY FIELD OF EMPLOYMENT, CONTROL, AND EMPLOYMENT STATUS: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | PRIVATE | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL-TIME | PART-TIME | TOTAL | FULL-TIME | PART-TIME |
| TOTAL | 29,962 | 25,596 | 4,366 | 18,496 | 16,585 | 1,911 |
| ENGINEERS (TOTAL) | 2,799 | 2,288 | 511 | 1,903 | 1,657 | 246 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 83 | 69 | 14 | 200 | 176 | 24 |
| (2) CHEMICAL ENGINEERS | 175 | 135 | 40 | 148 | 129 | 19 |
| (3) CIVIL ENGINEERS | 382 | 315 | 67 | 126 | 107 | 19 |
| (4) ELECTRICAL ENGINEERS | 468 | 403 | 65 | 564 | 487 | 77 |
| (5) MECHANICAL ENGINEERS | 344 | 273 | 71 | 259 | 232 | 27 |
| (6) OTHER ENGINEERS | 1,347 | 1,093 | 254 | 606 | 526 | 80 |
| PHYSICAL SCIENTISTS (TOTAL) | 3,524 | 2,971 | 553 | 2,496 | 2,327 | 169 |
| (1) CHEMISTS | 1,540 | 1,230 | 310 | 1,219 | 1,124 | 95 |
| (2) PHYSICISTS | 1,277 | 1,123 | 154 | 1,063 | 1,009 | 54 |
| (3) OTHER PHYSICAL SCIENTISTS | 707 | 618 | 89 | 214 | 194 | 20 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 1,289 | 1,110 | 179 | 523 | 484 | 39 |
| (1) EARTH SCIENTISTS | 608 | 518 | 90 | 273 | 248 | 25 |
| (2) ATMOSPHERIC SCIENTISTS | 203 | 167 | 36 | 63 | 55 | 8 |
| (3) OCEANOGRAPHERS | 478 | 425 | 53 | 187 | 181 | 6 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 868 | 759 | 109 | 562 | 516 | 46 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 413 | 363 | 50 | 338 | 310 | 28 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 455 | 396 | 59 | 224 | 206 | 18 |
| LIFE SCIENTISTS (TOTAL) | 17,964 | 15,639 | 2,325 | 11,613 | 10,459 | 1,154 |
| (1) AGRICULTURAL SCIENTISTS | 4,155 | 3,849 | 306 | 106 | 106 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 6,039 | 5,368 | 671 | 4,236 | 3,903 | 333 |
| (3) MEDICAL SCIENTISTS | 7,770 | 6,422 | 1,348 | 7,273 | 6,452 | 821 |
| PSYCHOLOGISTS (TOTAL) | 900 | 670 | 230 | 469 | 390 | 79 |
| SOCIAL SCIENTISTS (TOTAL) | 2,618 | 2,159 | 459 | 930 | 752 | 178 |
| (1) ECONOMISTS | 1,015 | 912 | 103 | 175 | 149 | 26 |
| (2) SOCIOLOGISTS | 424 | 350 | 74 | 230 | 191 | 39 |
| (3) POLITICAL SCIENTISTS | 307 | 232 | 75 | 148 | 112 | 36 |
| (4) HISTORIANS | 160 | 136 | 24 | 69 | 57 | 12 |
| (5) OTHER SOCIAL SCIENTISTS | 712 | 529 | 183 | 308 | 243 | 65 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-43. GEOGRAPHIC DISTRIBUTION OF R&D SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY CONTROL AND EMPLOYMENT STATUS: JANUARY 1975

| DIVISION AND STATE | PUBLIC INSTITUTIONS | | | PRIVATE INSTITUTIONS | | |
|---|---|---|---|---|---|---|
| | TOTAL | FULL TIME | PART TIME | TOTAL | FULL TIME | PART TIME |
| UNITED STATES TOTAL | 30,786 | 26,358 | 4,428 | 18,819 | 16,841 | 1,978 |
| NEW ENGLAND | 808 | 723 | 85 | 4,438 | 3,708 | 730 |
| CONNECTICUT | 350 | 305 | 45 | 1,029 | 879 | 150 |
| MAINE | 173 | 159 | 14 | 2 | 2 | 0 |
| MASSACHUSETTS | 77 | 72 | 5 | 3,212 | 2,667 | 545 |
| NEW HAMPSHIRE | 37 | 29 | 8 | 77 | 64 | 13 |
| RHODE ISLAND | 94 | 90 | 4 | 116 | 95 | 21 |
| VERMONT | 77 | 68 | 9 | 2 | 1 | 1 |
| MIDDLE ATLANTIC | 2,598 | 2,316 | 282 | 4,350 | 3,876 | 474 |
| NEW JERSEY | 534 | 491 | 43 | 358 | 316 | 42 |
| NEW YORK | 1,163 | 1,005 | 158 | 3,404 | 3,099 | 305 |
| PENNSYLVANIA | 901 | 820 | 81 | 588 | 461 | 127 |
| EAST NORTH CENTRAL | 6,398 | 5,098 | 1,300 | 1,868 | 1,805 | 63 |
| ILLINOIS | 1,146 | 936 | 210 | 970 | 950 | 20 |
| INDIANA | 421 | 378 | 43 | 44 | 39 | 5 |
| MICHIGAN | 1,914 | 1,614 | 300 | 12 | 8 | 4 |
| OHIO | 1,033 | 729 | 304 | 740 | 719 | 21 |
| WISCONSIN | 1,884 | 1,441 | 443 | 102 | 89 | 13 |
| WEST NORTH CENTRAL | 2,940 | 2,689 | 251 | 1,144 | 1,081 | 63 |
| IOWA | 736 | 686 | 50 | 3 | 3 | 0 |
| KANSAS | 659 | 607 | 52 | 0 | 0 | 0 |
| MINNESOTA | 381 | 300 | 81 | 8 | 6 | 2 |
| MISSOURI | 588 | 548 | 40 | 1,116 | 1,055 | 61 |
| NEBRASKA | 239 | 230 | 9 | 17 | 17 | 0 |
| NORTH DAKOTA | 146 | 145 | 1 | 0 | 0 | 0 |
| SOUTH DAKOTA | 191 | 173 | 18 | 0 | 0 | 0 |
| SOUTH ATLANTIC | 4,466 | 4,166 | 300 | 3,397 | 3,114 | 283 |
| DELAWARE | 113 | 108 | 5 | 0 | 0 | 0 |
| DISTRICT OF COLUMBIA | 2 | 2 | 0 | 577 | 371 | 206 |
| FLORIDA | 1,094 | 1,051 | 43 | 353 | 304 | 49 |
| GEORGIA | 921 | 841 | 80 | 181 | 179 | 2 |
| MARYLAND | 583 | 505 | 78 | 1,556 | 1,548 | 8 |
| NORTH CAROLINA | 698 | 643 | 55 | 698 | 686 | 12 |
| SOUTH CAROLINA | 272 | 264 | 8 | 2 | 2 | 0 |
| VIRGINIA | 630 | 605 | 25 | 29 | 24 | 5 |
| WEST VIRGINIA | 153 | 147 | 6 | 1 | 0 | 1 |
| EAST SOUTH CENTRAL | 1,537 | 1,474 | 63 | 405 | 344 | 61 |
| ALABAMA | 571 | 542 | 29 | 1 | 1 | 0 |
| KENTUCKY | 355 | 334 | 21 | 3 | 3 | 0 |
| MISSISSIPPI | 308 | 307 | 1 | 2 | 2 | 0 |
| TENNESSEE | 303 | 291 | 12 | 399 | 338 | 61 |
| WEST SOUTH CENTRAL | 3,400 | 3,049 | 351 | 816 | 728 | 88 |
| ARKANSAS | 340 | 323 | 17 | 2 | 2 | 0 |
| LOUISIANA | 392 | 365 | 27 | 86 | 78 | 8 |
| OKLAHOMA | 318 | 279 | 39 | 5 | 5 | 0 |
| TEXAS | 2,350 | 2,082 | 268 | 723 | 643 | 80 |
| MOUNTAIN | 2,049 | 1,939 | 110 | 234 | 224 | 10 |
| ARIZONA | 454 | 416 | 38 | 0 | 0 | 0 |
| COLORADO | 421 | 406 | 15 | 151 | 143 | 8 |
| IDAHO | 139 | 137 | 2 | 1 | 1 | 0 |
| MONTANA | 124 | 121 | 3 | 0 | 0 | 0 |
| NEVADA | 138 | 129 | 9 | 0 | 0 | 0 |
| NEW MEXICO | 240 | 232 | 8 | 1 | 1 | 0 |
| UTAH | 424 | 389 | 35 | 81 | 79 | 2 |
| WYOMING | 109 | 109 | 0 | 0 | 0 | 0 |
| PACIFIC | 6,293 | 4,663 | 1,630 | 2,166 | 1,960 | 206 |
| ALASKA | 96 | 92 | 4 | 0 | 0 | 0 |
| CALIFORNIA | 3,548 | 2,339 | 1,209 | 2,153 | 1,949 | 204 |
| HAWAII | 266 | 248 | 18 | 0 | 0 | 0 |
| OREGON | 980 | 746 | 234 | 12 | 10 | 2 |
| WASHINGTON | 1,403 | 1,238 | 165 | 1 | 1 | 0 |
| OUTLYING AREAS | 297 | 241 | 56 | 1 | 1 | 0 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-44. NUMBER OF PH.D. AND SC.D. SCIENTISTS AND ENGINEERS EMPLOYED IN UNIVERSITIES AND COLLEGES, BY MAJOR FIELD OF EMPLOYMENT, EMPLOYMENT STATUS, AND TYPE OF INSTITUTION: JANUARY 1974-75

| FIELD AND EMPLOYMENT STATUS | ALL INSTITUTIONS | | INSTITUTIONS GRANTING: DOCTORATE IN S&E | | MASTER'S IN S&E | | BACHELOR'S IN S&E | | OTHER THAN SCIENCE | | TWO-YEAR INSTITUTIONS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| ALL FIELDS | | | | | | | | | | | | |
| TOTAL | 140,341 | 139,955 | 100,624 | 96,551 | 23,378 | 21,013 | 16,968 | 17,335 | 747 | 612 | 4,624 | 4,444 |
| FULL-TIME | 131,890 | 126,788 | 91,413 | 87,905 | 21,130 | 19,270 | 15,486 | 15,819 | 687 | 603 | 3,374 | 3,391 |
| PART-TIME | 14,451 | 13,167 | 9,211 | 8,646 | 2,248 | 1,743 | 1,482 | 1,516 | 260 | 209 | 1,250 | 1,053 |
| ENGINEERS | | | | | | | | | | | | |
| TOTAL | 14,669 | 14,048 | 13,054 | 12,518 | 1,066 | 970 | 379 | 387 | 21 | 51 | 168 | 168 |
| FULL-TIME | 13,163 | 12,817 | 11,789 | 11,467 | 909 | 857 | 349 | 360 | 11 | 51 | 115 | 128 |
| PART-TIME | 1,506 | 1,231 | 1,265 | 1,051 | 157 | 113 | 30 | 27 | 11 | 01 | 53 | 40 |
| PHYSICAL SCIENTISTS | | | | | | | | | | | | |
| TOTAL | 21,674 | 21,568 | 13,619 | 13,781 | 3,588 | 3,335 | 3,355 | 3,422 | 100 | 88 | 1,016 | 942 |
| FULL-TIME | 19,882 | 19,958 | 12,627 | 12,786 | 3,284 | 3,135 | 3,113 | 3,196 | 76 | 65 | 782 | 778 |
| PART-TIME | 1,792 | 1,610 | 988 | 995 | 304 | 200 | 242 | 226 | 24 | 23 | 234 | 164 |
| ENVIRONMENTAL SCIENTISTS | | | | | | | | | | | | |
| TOTAL | 5,018 | 4,830 | 3,671 | 3,534 | 857 | 765 | 385 | 421 | 28 | 21 | 77 | 89 |
| FULL-TIME | 4,614 | 4,465 | 3,384 | 3,298 | 792 | 707 | 358 | 393 | 18 | 7 | 62 | 60 |
| PART-TIME | 404 | 365 | 287 | 236 | 65 | 58 | 27 | 28 | 10 | 14 | 15 | 29 |
| MATHEMATICAL SCIENTISTS | | | | | | | | | | | | |
| TOTAL | 13,110 | 12,484 | 8,160 | 7,837 | 2,691 | 2,321 | 1,608 | 1,876 | 59 | 50 | 392 | 400 |
| FULL-TIME | 12,033 | 11,596 | 7,556 | 7,335 | 2,468 | 2,178 | 1,522 | 1,756 | 44 | 34 | 263 | 295 |
| PART-TIME | 1,077 | 888 | 604 | 502 | 223 | 143 | 136 | 122 | 15 | 16 | 129 | 105 |
| LIFE SCIENTISTS | | | | | | | | | | | | |
| TOTAL | 42,116 | 39,354 | 34,582 | 31,785 | 3,639 | 3,365 | 2,863 | 3,006 | 181 | 109 | 931 | 919 |
| FULL-TIME | 38,294 | 35,630 | 31,410 | 28,708 | 3,383 | 3,338 | 2,687 | 2,820 | 77 | 68 | 735 | 704 |
| PART-TIME | 3,822 | 3,724 | 3,092 | 3,047 | 254 | 235 | 176 | 186 | 104 | 41 | 196 | 215 |
| PSYCHOLOGISTS | | | | | | | | | | | | |
| TOTAL | 13,647 | 13,020 | 7,142 | 6,963 | 3,441 | 2,969 | 2,213 | 2,288 | 118 | 104 | 733 | 696 |
| FULL-TIME | 11,269 | 10,874 | 5,959 | 5,887 | 2,862 | 2,542 | 1,886 | 1,902 | 95 | 73 | 447 | 468 |
| PART-TIME | 2,378 | 2,146 | 1,183 | 1,076 | 559 | 427 | 327 | 386 | 23 | 29 | 286 | 228 |
| SOCIAL SCIENTISTS | | | | | | | | | | | | |
| TOTAL | 36,107 | 34,651 | 20,480 | 20,163 | 8,096 | 7,088 | 5,965 | 5,935 | 259 | 235 | 1,307 | 1,230 |
| FULL-TIME | 32,635 | 31,448 | 18,688 | 18,424 | 7,410 | 6,521 | 5,391 | 5,396 | 176 | 149 | 970 | 958 |
| PART-TIME | 3,472 | 3,203 | 1,792 | 1,739 | 686 | 567 | 574 | 539 | 83 | 86 | 337 | 272 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-45. NUMBER OF GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT AND FUNCTION: JANUARY 1974-75

| FIELD OF EMPLOYMENT | TOTAL | | FUNCTION: TEACHING | | RESEARCH & DEVELOPMENT | | OTHER ACTIVITIES | |
|---|---|---|---|---|---|---|---|---|
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| TOTAL | 99,294 | 96,186 | 55,839 | 55,327 | 39,192 | 37,394 | 4,263 | 3,505 |
| ENGINEERS (TOTAL) | 15,524 | 14,931 | 5,389 | 5,104 | 9,585 | 9,423 | 550 | 404 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 767 | 814 | 176 | 193 | 582 | 615 | 9 | 6 |
| (2) CHEMICAL ENGINEERS | 1,645 | 1,581 | 582 | 562 | 974 | 954 | 89 | 65 |
| (3) CIVIL ENGINEERS | 2,488 | 2,285 | 970 | 818 | 1,453 | 1,389 | 116 | 78 |
| (4) ELECTRICAL ENGINEERS | 3,578 | 3,610 | 1,343 | 1,493 | 1,961 | 2,043 | 74 | 74 |
| (5) MECHANICAL ENGINEERS | 2,290 | 2,265 | 971 | 861 | 1,238 | 1,344 | 81 | 60 |
| (6) OTHER ENGINEERS | 4,756 | 4,376 | 1,188 | 1,177 | 3,377 | 3,078 | 181 | 121 |
| PHYSICAL SCIENTISTS (TOTAL) | 17,771 | 18,255 | 10,867 | 10,992 | 6,423 | 6,749 | 481 | 514 |
| (1) CHEMISTS | 10,177 | 10,278 | 6,823 | 6,852 | 3,041 | 3,142 | 313 | 284 |
| (2) PHYSICISTS | 6,602 | 6,855 | 3,646 | 3,740 | 2,797 | 2,908 | 159 | 207 |
| (3) OTHER PHYSICAL SCIENTISTS | 992 | 1,122 | 398 | 400 | 585 | 699 | 91 | 23 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 5,360 | 4,780 | 2,342 | 2,127 | 2,823 | 2,444 | 195 | 129 |
| (1) EARTH SCIENTISTS | 3,939 | 3,523 | 2,051 | 1,928 | 1,713 | 1,481 | 175 | 114 |
| (2) ATMOSPHERIC SCIENTISTS | 602 | 515 | 158 | 110 | 433 | 403 | 11 | 2 |
| (3) OCEANOGRAPHERS | 819 | 662 | 133 | 89 | 677 | 560 | 9 | 13 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 8,687 | 8,683 | 6,988 | 6,978 | 1,477 | 1,460 | 222 | 245 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 8,966 | 7,823 | 6,823 | 6,974 | 788 | 782 | 155 | 167 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 1,721 | 1,665 | 965 | 904 | 689 | 678 | 67 | 78 |
| LIFE SCIENTISTS (TOTAL) | 26,753 | 25,183 | 13,570 | 13,544 | 11,968 | 10,659 | 1,215 | 980 |
| (1) AGRICULTURAL SCIENTISTS | 4,871 | 4,694 | 1,163 | 1,139 | 3,560 | 3,344 | 148 | 211 |
| (2) BIOLOGICAL SCIENTISTS | 15,644 | 14,533 | 9,399 | 8,853 | 5,835 | 5,279 | 490 | 401 |
| (3) MEDICAL SCIENTISTS | 6,238 | 5,956 | 3,048 | 3,552 | 2,573 | 2,036 | 617 | 368 |
| PSYCHOLOGISTS (TOTAL) | 7,991 | 7,422 | 5,092 | 4,844 | 2,213 | 2,070 | 686 | 508 |
| SOCIAL SCIENTISTS (TOTAL) | 17,208 | 17,012 | 11,591 | 11,738 | 4,703 | 4,549 | 914 | 725 |
| (1) ECONOMISTS | 4,209 | 4,041 | 2,429 | 2,469 | 1,672 | 1,462 | 108 | 110 |
| (2) SOCIOLOGISTS | 3,035 | 3,076 | 2,034 | 2,176 | 868 | 789 | 133 | 113 |
| (3) POLITICAL SCIENTISTS | 2,662 | 2,808 | 1,956 | 1,960 | 683 | 694 | 153 | 146 |
| (4) HISTORIANS | 3,326 | 3,414 | 2,745 | 2,831 | 386 | 405 | 195 | 178 |
| (5) OTHER SOCIAL SCIENTISTS | 3,976 | 3,681 | 2,477 | 2,304 | 1,174 | 1,199 | 325 | 178 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-46. NUMBER OF GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT, CONTROL, AND FUNCTION: JANUARY 1975

| FIELD OF EMPLOYMENT | PUBLIC | | | | PRIVATE | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES |
| TOTAL | 75,418 | 43,261 | 28,867 | 3,262 | 23,884 | 12,978 | 10,905 | 1,001 |
| ENGINEERS (TOTAL) | 10,809 | 3,977 | 6,429 | 403 | 4,715 | 1,412 | 3,156 | 147 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 484 | 130 | 351 | 3 | 283 | 46 | 231 | 6 |
| (2) CHEMICAL ENGINEERS | 1,154 | 427 | 691 | 36 | 491 | 155 | 323 | 13 |
| (3) CIVIL ENGINEERS | 1,931 | 725 | 1,119 | 87 | 557 | 204 | 324 | 29 |
| (4) ELECTRICAL ENGINEERS | 2,317 | 1,106 | 1,163 | 48 | 1,261 | 437 | 798 | 26 |
| (5) MECHANICAL ENGINEERS | 1,676 | 772 | 858 | 46 | 614 | 199 | 380 | 35 |
| (6) OTHER ENGINEERS | 3,247 | 817 | 2,287 | 143 | 1,509 | 371 | 1,100 | 38 |
| PHYSICAL SCIENTISTS (TOTAL) | 12,545 | 8,181 | 4,111 | 333 | 5,226 | 2,766 | 2,312 | 148 |
| (1) CHEMISTS | 7,420 | 5,149 | 2,049 | 222 | 2,757 | 1,674 | 992 | 91 |
| (2) PHYSICISTS | 4,290 | 2,599 | 1,586 | 105 | 2,312 | 1,047 | 1,211 | 54 |
| (3) OTHER PHYSICAL SCIENTISTS | 835 | 353 | 476 | 6 | 157 | 45 | 109 | 3 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 4,321 | 1,972 | 2,184 | 165 | 1,039 | 370 | 639 | 30 |
| (1) EARTH SCIENTISTS | 3,171 | 1,776 | 1,246 | 153 | 768 | 277 | 469 | 22 |
| (2) ATMOSPHERIC SCIENTISTS | 492 | 93 | 396 | 3 | 118 | 65 | 37 | 8 |
| (3) OCEANOGRAPHERS | 658 | 105 | 544 | 9 | 161 | 28 | 133 | 0 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 6,839 | 5,722 | 947 | 170 | 1,848 | 1,266 | 530 | 52 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 5,502 | 4,919 | 478 | 105 | 1,464 | 1,104 | 310 | 50 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 1,337 | 803 | 469 | 65 | 384 | 162 | 220 | 2 |
| LIFE SCIENTISTS (TOTAL) | 20,936 | 10,076 | 9,985 | 875 | 5,817 | 3,494 | 1,983 | 340 |
| (1) AGRICULTURAL SCIENTISTS | 4,616 | 1,056 | 3,414 | 146 | 255 | 107 | 146 | 2 |
| (2) BIOLOGICAL SCIENTISTS | 12,449 | 7,426 | 4,637 | 386 | 3,195 | 1,933 | 1,198 | 64 |
| (3) MEDICAL SCIENTISTS | 3,871 | 1,594 | 1,934 | 343 | 2,367 | 1,454 | 639 | 274 |
| PSYCHOLOGISTS (TOTAL) | 6,271 | 4,028 | 1,687 | 556 | 1,720 | 1,064 | 526 | 130 |
| SOCIAL SCIENTISTS (TOTAL) | 13,689 | 9,385 | 3,544 | 760 | 3,519 | 2,206 | 1,159 | 154 |
| (1) ECONOMISTS | 3,323 | 1,893 | 1,354 | 78 | 884 | 536 | 318 | 30 |
| (2) SOCIOLOGISTS | 2,368 | 1,696 | 605 | 109 | 667 | 380 | 263 | 24 |
| (3) POLITICAL SCIENTISTS | 2,854 | 1,526 | 435 | 93 | 608 | 380 | 168 | 60 |
| (4) HISTORIANS | 2,661 | 2,215 | 270 | 176 | 665 | 530 | 116 | 19 |
| (5) OTHER SOCIAL SCIENTISTS | 3,281 | 2,097 | 880 | 304 | 695 | 380 | 294 | 21 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-47. NUMBER OF GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS IN UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT, TYPE OF INSTITUTION, AND FUNCTION: JANUARY 1975

| FIELD OF EMPLOYMENT | INSTITUTIONS GRANTING: | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | DOCTORATE IN S&E | | | | MASTER'S IN S&E | | | |
| | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES | TOTAL | TEACHING | RESEARCH & DEVELOPMENT | OTHER ACTIVITIES |
| TOTAL | 94,040 | 41,739 | 38,635 | 3,666 | 5,254 | 4,108 | 557 | 59 |
| ENGINEERS (TOTAL) | 15,320 | 5,238 | 9,547 | 535 | 804 | 751 | 38 | 15 |
| (1) AERONAUTICAL & ASTRONAUTICAL ENGINEERS | 762 | 173 | 582 | 7 | 5 | 3 | 0 | 2 |
| (2) CHEMICAL ENGINEERS | 1,628 | 571 | 968 | 89 | 171 | 111 | 61 | 0 |
| (3) CIVIL ENGINEERS | 2,444 | 902 | 1,431 | 111 | 441 | 271 | 121 | 5 |
| (4) ELECTRICAL ENGINEERS | 3,511 | 1,487 | 1,952 | 72 | 671 | 561 | 91 | 2 |
| (5) MECHANICAL ENGINEERS | 2,248 | 936 | 1,231 | 81 | 421 | 351 | 71 | 0 |
| (6) OTHER ENGINEERS | 4,727 | 1,169 | 3,383 | 175 | 291 | 191 | 41 | 6 |
| PHYSICAL SCIENTISTS (TOTAL) | 16,889 | 10,111 | 6,364 | 414 | 882 | 756 | 59 | 67 |
| (1) CHEMISTS | 9,558 | 6,293 | 2,994 | 271 | 619 | 530 | 47 | 42 |
| (2) PHYSICISTS | 6,362 | 3,439 | 2,787 | 136 | 240 | 207 | 10 | 23 |
| (3) OTHER PHYSICAL SCIENTISTS | 969 | 379 | 583 | 7 | 23 | 19 | 2 | 2 |
| ENVIRONMENTAL SCIENTISTS (TOTAL) | 5,143 | 2,191 | 2,790 | 162 | 217 | 151 | 33 | 33 |
| (1) EARTH SCIENTISTS | 3,756 | 1,914 | 1,699 | 143 | 183 | 137 | 14 | 32 |
| (2) ATMOSPHERIC SCIENTISTS | 599 | 156 | 433 | 10 | 3 | 2 | 0 | 1 |
| (3) OCEANOGRAPHERS | 788 | 121 | 658 | 9 | 31 | 12 | 19 | 0 |
| MATHEMATICAL SCIENTISTS (TOTAL) | 8,079 | 6,461 | 1,452 | 166 | 608 | 527 | 25 | 56 |
| (1) MATHEMATICIANS (EXCLUDING COMPUTER SCIENTISTS) | 6,423 | 5,543 | 771 | 109 | 543 | 480 | 17 | 46 |
| (2) COMPUTER SCIENTISTS (EXCLUDING PROGRAMMERS) | 1,656 | 918 | 681 | 57 | 65 | 47 | 8 | 10 |
| LIFE SCIENTISTS (TOTAL) | 23,401 | 12,533 | 11,783 | 1,085 | 1,352 | 1,037 | 185 | 130 |
| (1) AGRICULTURAL SCIENTISTS | 4,797 | 1,135 | 3,523 | 139 | 74 | 28 | 37 | 9 |
| (2) BIOLOGICAL SCIENTISTS | 14,409 | 8,373 | 5,690 | 346 | 1,235 | 906 | 145 | 184 |
| (3) MEDICAL SCIENTISTS | 4,195 | 3,025 | 2,570 | 600 | 43 | 23 | 3 | 17 |
| PSYCHOLOGISTS (TOTAL) | 7,140 | 4,444 | 2,131 | 565 | 851 | 648 | 82 | 121 |
| SOCIAL SCIENTISTS (TOTAL) | 16,068 | 10,761 | 4,568 | 739 | 1,140 | 830 | 135 | 175 |
| (1) ECONOMISTS | 4,064 | 2,311 | 1,667 | 86 | 145 | 118 | 9 | 22 |
| (2) SOCIOLOGISTS | 2,805 | 1,849 | 847 | 109 | 230 | 185 | 21 | 24 |
| (3) POLITICAL SCIENTISTS | 2,454 | 1,747 | 581 | 126 | 208 | 159 | 22 | 27 |
| (4) HISTORIANS | 2,979 | 2,523 | 344 | 112 | 347 | 222 | 42 | 83 |
| (5) OTHER SOCIAL SCIENTISTS | 3,766 | 2,331 | 1,129 | 306 | 210 | 146 | 45 | 19 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-48. GEOGRAPHIC DISTRIBUTION OF GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS IN UNIVERSITIES AND COLLEGES, BY CONTROL AND FUNCTION: JANUARY 1975

| DIVISION AND STATE | PUBLIC INSTITUTIONS | | | | PRIVATE INSTITUTIONS | | | |
|---|---|---|---|---|---|---|---|---|
| | TOTAL | TEACHING | R & D | OTHER | TOTAL | TEACHING | R & D | OTHER |
| UNITED STATES TOTAL | 75,410 | 43,261 | 28,887 | 3,262 | 23,884 | 12,578 | 10,305 | 1,001 |
| NEW ENGLAND | 2,585 | 1,606 | 822 | 157 | 5,814 | 3,612 | 2,144 | 58 |
| CONNECTICUT | 553 | 356 | 189 | 8 | 443 | 267 | 164 | 12 |
| MAINE | 259 | 140 | 119 | 0 | 0 | 0 | 0 | 0 |
| MASSACHUSETTS | 1,017 | 653 | 266 | 98 | 4,812 | 3,080 | 1,687 | 45 |
| NEW HAMPSHIRE | 250 | 197 | 53 | 0 | 143 | 30 | 113 | 0 |
| RHODE ISLAND | 345 | 165 | 173 | 7 | 415 | 234 | 180 | 1 |
| VERMONT | 161 | 95 | 22 | 44 | 1 | 1 | 0 | 0 |
| MIDDLE ATLANTIC | 7,797 | 4,429 | 3,276 | 92 | 7,697 | 4,206 | 3,286 | 205 |
| NEW JERSEY | 1,582 | 649 | 915 | 18 | 626 | 322 | 303 | 1 |
| NEW YORK | 3,531 | 2,011 | 1,469 | 51 | 5,022 | 2,675 | 2,290 | 57 |
| PENNSYLVANIA | 2,684 | 1,769 | 892 | 23 | 2,049 | 1,209 | 693 | 147 |
| EAST NORTH CENTRAL | 18,799 | 12,044 | 6,156 | 599 | 2,619 | 1,144 | 1,184 | 291 |
| ILLINOIS | 4,313 | 2,509 | 1,671 | 133 | 1,285 | 609 | 659 | 17 |
| INDIANA | 3,369 | 2,105 | 1,092 | 172 | 342 | 26 | 64 | 252 |
| MICHIGAN | 4,057 | 3,100 | 925 | 32 | 130 | 118 | 12 | 0 |
| OHIO | 4,188 | 2,909 | 1,071 | 208 | 654 | 274 | 358 | 22 |
| WISCONSIN | 2,872 | 1,421 | 1,397 | 54 | 208 | 117 | 91 | 0 |
| WEST NORTH CENTRAL | 8,333 | 4,647 | 3,500 | 186 | 818 | 332 | 400 | 86 |
| IOWA | 1,917 | 954 | 945 | 18 | 56 | 55 | 1 | 0 |
| KANSAS | 1,730 | 831 | 871 | 36 | 3 | 0 | 0 | 0 |
| MINNESOTA | 2,112 | 1,418 | 690 | 4 | 0 | 0 | 0 | 0 |
| MISSOURI | 1,383 | 736 | 574 | 73 | 646 | 243 | 382 | 21 |
| NEBRASKA | 583 | 448 | 123 | 12 | 116 | 34 | 17 | 65 |
| NORTH DAKOTA | 322 | 143 | 137 | 42 | 0 | 0 | 0 | 0 |
| SOUTH DAKOTA | 278 | 117 | 160 | 1 | 0 | 0 | 0 | 0 |
| SOUTH ATLANTIC | 10,781 | 5,839 | 4,319 | 623 | 2,727 | 1,209 | 1,278 | 240 |
| DELAWARE | 463 | 191 | 261 | 11 | 0 | 0 | 0 | 0 |
| DISTRICT OF COLUMBIA | 9 | 0 | 0 | 9 | 856 | 479 | 332 | 45 |
| FLORIDA | 1,893 | 867 | 974 | 52 | 455 | 119 | 155 | 181 |
| GEORGIA | 1,636 | 767 | 776 | 93 | 308 | 117 | 181 | 10 |
| MARYLAND | 1,318 | 894 | 381 | 43 | 641 | 282 | 356 | 3 |
| NORTH CAROLINA | 2,385 | 1,579 | 777 | 29 | 445 | 200 | 244 | 1 |
| SOUTH CAROLINA | 1,059 | 407 | 312 | 340 | 0 | 0 | 0 | 0 |
| VIRGINIA | 1,555 | 869 | 658 | 28 | 22 | 12 | 10 | 0 |
| WEST VIRGINIA | 463 | 265 | 180 | 18 | 0 | 0 | 0 | 0 |
| EAST SOUTH CENTRAL | 3,854 | 2,089 | 1,412 | 353 | 348 | 236 | 99 | 13 |
| ALABAMA | 1,035 | 618 | 393 | 24 | 117 | 94 | 16 | 7 |
| KENTUCKY | 926 | 494 | 420 | 12 | 0 | 0 | 0 | 0 |
| MISSISSIPPI | 506 | 287 | 165 | 54 | 1 | 1 | 0 | 0 |
| TENNESSEE | 1,387 | 690 | 434 | 263 | 230 | 141 | 83 | 6 |
| WEST SOUTH CENTRAL | 7,800 | 4,348 | 2,797 | 655 | 889 | 353 | 473 | 63 |
| ARKANSAS | 399 | 207 | 164 | 28 | 0 | 0 | 0 | 0 |
| LOUISIANA | 1,047 | 721 | 306 | 20 | 137 | 111 | 26 | 0 |
| OKLAHOMA | 1,225 | 679 | 428 | 118 | 25 | 13 | 12 | 0 |
| TEXAS | 5,129 | 2,741 | 1,899 | 489 | 727 | 229 | 435 | 63 |
| MOUNTAIN | 5,629 | 2,737 | 2,560 | 332 | 654 | 524 | 117 | 13 |
| ARIZONA | 1,185 | 718 | 446 | 21 | 0 | 0 | 0 | 0 |
| COLORADO | 1,615 | 771 | 838 | 6 | 142 | 75 | 54 | 13 |
| IDAHO | 294 | 147 | 147 | 0 | 0 | 0 | 0 | 0 |
| MONTANA | 498 | 285 | 213 | 0 | 0 | 0 | 0 | 0 |
| NEVADA | 228 | 115 | 95 | 18 | 0 | 0 | 0 | 0 |
| NEW MEXICO | 707 | 426 | 262 | 19 | 0 | 0 | 0 | 0 |
| UTAH | 759 | 253 | 421 | 85 | 512 | 449 | 63 | 0 |
| WYOMING | 343 | 22 | 138 | 183 | 0 | 0 | 0 | 0 |
| PACIFIC | 9,648 | 5,410 | 3,986 | 252 | 2,318 | 962 | 1,324 | 32 |
| ALASKA | 80 | 45 | 33 | 2 | 0 | 0 | 0 | 0 |
| CALIFORNIA | 5,706 | 3,371 | 2,172 | 163 | 2,300 | 946 | 1,322 | 32 |
| HAWAII | 532 | 287 | 196 | 49 | 0 | 0 | 0 | 0 |
| OREGON | 1,315 | 640 | 669 | 6 | 2 | 0 | 2 | 0 |
| WASHINGTON | 2,015 | 1,067 | 916 | 32 | 16 | 16 | 0 | 0 |
| OUTLYING AREAS | 184 | 112 | 59 | 13 | 0 | 0 | 0 | 0 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-49. NUMBER OF TECHNICIANS EMPLOYED IN THE SCIENCES AND ENGINEERING AT UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT AND FUNCTION: JANUARY 1974-75

| FIELD OF EMPLOYMENT | TOTAL | | RESEARCH & DEVELOPMENT | | OTHER ACTIVITIES | |
|---|---|---|---|---|---|---|
| | 1975 | 1974 | 1975 | 1974 | 1975 | 1974 |
| TOTAL | 57,082 | 53,945 | 36,106 | 35,925 | 20,976 | 18,020 |
| ENGINEERING TECHNICIANS | 5,441 | 4,905 | 3,006 | 2,870 | 2,435 | 2,035 |
| PHYSICAL SCIENCE TECHNICIANS | 4,892 | 4,890 | 2,767 | 2,866 | 2,125 | 2,024 |
| ENVIRONMENTAL SCIENCE TECHNICIANS | 1,461 | 1,265 | 1,141 | 1,011 | 320 | 254 |
| MATHEMATICS TECHNICIANS | 3,905 | 2,593 | 1,237 | 924 | 2,668 | 1,669 |
| BIOLOGICAL & AGRICULTURAL SCIENCE TECHNICIANS | 16,657 | 15,046 | 13,292 | 12,060 | 3,365 | 2,986 |
| MEDICAL & HEALTH RELATED TECHNICIANS | 22,447 | 23,090 | 13,244 | 14,773 | 9,203 | 8,317 |
| PSYCHOLOGY TECHNICIANS | 1,031 | 975 | 696 | 686 | 335 | 289 |
| SOCIAL SCIENCE TECHNICIANS | 1,248 | 1,181 | 723 | 735 | 525 | 446 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-50. NUMBER OF TECHNICIANS EMPLOYED IN THE SCIENCES AND ENGINEERING AT UNIVERSITIES AND COLLEGES, BY FIELD OF EMPLOYMENT AND TYPE OF INSTITUTION: JANUARY 1975

| FIELD OF EMPLOYMENT | ALL INSTITUTIONS | INSTITUTIONS GRANTING: DOCTORATE IN S&E | MASTER'S IN S&E | BACHELOR'S IN S&E | OTHER THAN SCIENCE | TWO-YEAR INSTITUTIONS |
|---|---|---|---|---|---|---|
| TOTAL | 57,082 | 51,956 | 1,887 | 1,232 | 25 | 1,982 |
| ENGINEERING TECHNICIANS | 5,441 | 4,421 | 295 | 240 | 3 | 482 |
| PHYSICAL SCIENCE TECHNICIANS | 4,892 | 3,925 | 424 | 264 | 3 | 276 |
| ENVIRONMENTAL SCIENCE TECHNICIANS | 1,461 | 1,337 | 68 | 31 | 1 | 24 |
| MATHEMATICS TECHNICIANS | 3,905 | 2,667 | 416 | 285 | 2 | 535 |
| BIOLOGICAL & AGRICULTURAL SCIENCE TECHNICIANS | 16,657 | 15,587 | 433 | 258 | 4 | 375 |
| MEDICAL & HEALTH RELATED TECHNICIANS | 22,447 | 22,018 | 103 | 65 | 11 | 250 |
| PSYCHOLOGY TECHNICIANS | 1,031 | 871 | 101 | 40 | 1 | 18 |
| SOCIAL SCIENCE TECHNICIANS | 1,248 | 1,130 | 47 | 49 | 0 | 22 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-51 SUMMARY DATA FOR 2,209 UNIVERSITIES AND COLLEGES: JANUARY 1975

(SUMMARIZED FROM NSF SURVEY FORM 724 REPRODUCED IN PART 2)

ITEM 1 - FULL-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 22478 | 17543 | 4047 | 888 |
| (1) AERO. & ASTRO. ENGRS. | 967 | 691 | 266 | 10 |
| (2) CHEMICAL ENGINEERS | 1590 | 1268 | 267 | 55 |
| (3) CIVIL ENGINEERS | 3794 | 3243 | 434 | 117 |
| (4) ELECTRICAL ENGINEERS | 5367 | 4295 | 910 | 162 |
| (5) MECHANICAL ENGINEERS | 4328 | 3681 | 530 | 117 |
| (6) OTHER ENGINEERS | 6452 | 4365 | 1640 | 427 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 28833 | 20860 | 5507 | 466 |
| (1) CHEMISTS | 13943 | 11208 | 2472 | 263 |
| (2) PHYSICISTS | 10953 | 8589 | 2215 | 149 |
| (3) OTHER PHYSICAL SCIENTISTS | 1937 | 1063 | 820 | 54 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 6782 | 4988 | 1649 | 145 |
| (1) EARTH SCIENTISTS | 5168 | 4254 | 805 | 109 |
| (2) ATMOSPHERIC SCIENTISTS | 564 | 323 | 222 | 19 |
| (3) OCEANOGRAPHERS | 1050 | 411 | 622 | 17 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 22524 | 20406 | 1368 | 750 |
| (1) MATHEMATICIANS | 18747 | 17806 | 719 | 222 |
| (2) COMPUTER SCIENTISTS | 3777 | 2600 | 649 | 528 |
| E. LIFE SCIENTISTS (TOTAL) | 92419 | 56388 | 26347 | 9684 |
| (1) AGRICULTURAL SCIENTISTS | 13970 | 3873 | 3989 | 6108 |
| (2) BIOLOGICAL SCIENTISTS | 33291 | 23000 | 9470 | 841 |
| (3) MEDICAL SCIENTISTS | 45158 | 29515 | 12888 | 2755 |
| F. PSYCHOLOGISTS (TOTAL) | 16125 | 13783 | 1131 | 1211 |
| G. SOCIAL SCIENTISTS (TOTAL) | 52051 | 47556 | 3153 | 1345 |
| (1) ECONOMISTS | 10230 | 8688 | 1104 | 438 |
| (2) SOCIOLOGISTS | 10777 | 9975 | 588 | 214 |
| (3) POLITICAL SCIENTISTS | 8741 | 8207 | 372 | 162 |
| (4) HISTORIANS | 13572 | 13182 | 236 | 154 |
| (5) OTHER SOCIAL SCIENTISTS | 8731 | 7504 | 850 | 377 |
| H. TOTAL (SUM OF A TO G) | 239212 | 181524 | 43199 | 14489 |
| I. FTE DISTRIBUTION | 239212 | 173454 | 49094 | 16664 |

ITEM 2 - FULL-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 131890 | 103781 | 23839 | 4270 |
| B. MD., DDS., DVM., ETC. | 29604 | 20312 | 7337 | 1955 |
| C. MASTER'S | 59576 | 49979 | 5723 | 3874 |
| D. BACHELOR'S OR EQUIVALENT | 18142 | 7452 | 6300 | 4390 |
| E. TOTAL (SUM A TO D) | 239212 | 181524 | 43199 | 14489 |

ITEM 3 - PART-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 5184 | 4376 | 763 | 45 |
| (1) AERO. & ASTRO. ENGRS. | 152 | 112 | 38 | 2 |
| (2) CHEMICAL ENGINEERS | 252 | 191 | 59 | 2 |
| (3) CIVIL ENGINEERS | 1004 | 913 | 87 | 4 |
| (4) ELECTRICAL ENGINEERS | 1334 | 1182 | 144 | 8 |
| (5) MECHANICAL ENGINEERS | 930 | 827 | 99 | 4 |
| (6) OTHER ENGINEERS | 1512 | 1151 | 336 | 25 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 4131 | 3337 | 749 | 45 |
| (1) CHEMISTS | 2310 | 1860 | 421 | 29 |
| (2) PHYSICISTS | 1358 | 1129 | 217 | 12 |
| (3) OTHER PHYSICAL SCIENTISTS | 463 | 348 | 111 | 4 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 1035 | 792 | 230 | 13 |
| (1) EARTH SCIENTISTS | 804 | 674 | 123 | 7 |
| (2) ATMOSPHERIC SCIENTISTS | 113 | 66 | 44 | 3 |
| (3) OCEANOGRAPHERS | 118 | 52 | 63 | 3 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 5921 | 5648 | 169 | 104 |
| (1) MATHEMATICIANS | 4556 | 4448 | 87 | 21 |
| (2) COMPUTER SCIENTISTS | 1365 | 1200 | 82 | 83 |
| E. LIFE SCIENTISTS (TOTAL) | 23505 | 19260 | 3516 | 729 |
| (1) AGRICULTURAL SCIENTISTS | 999 | 588 | 308 | 103 |
| (2) BIOLOGICAL SCIENTISTS | 4729 | 3603 | 1038 | 88 |
| (3) MEDICAL SCIENTISTS | 17777 | 15069 | 2170 | 538 |
| F. PSYCHOLOGISTS (TOTAL) | 5602 | 5041 | 325 | 236 |
| G. SOCIAL SCIENTISTS (TOTAL) | 12603 | 11796 | 654 | 153 |
| (1) ECONOMISTS | 2483 | 2306 | 132 | 45 |
| (2) SOCIOLOGISTS | 3426 | 3274 | 120 | 32 |
| (3) POLITICAL SCIENTISTS | 1864 | 1722 | 112 | 30 |
| (4) HISTORIANS | 2186 | 2128 | 36 | 22 |
| (5) OTHER SOCIAL SCIENTISTS | 2644 | 2366 | 254 | 24 |
| H. TOTAL (SUM OF A TO G) | 57981 | 50250 | 6406 | 1325 |
| I. FTE DISTRIBUTION | 21594 | 17502 | 3468 | 624 |

ITEM 4 - PART-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 14451 | 11516 | 2613 | 322 |
| B. MD., DDS., DVM., ETC. | 15292 | 13516 | 1312 | 464 |
| C. MASTER'S | 20949 | 19406 | 1219 | 324 |
| D. BACHELOR'S OR EQUIVALENT | 7269 | 5812 | 1262 | 195 |
| E. TOTAL (SUM A TO D) | 57981 | 50250 | 6406 | 1305 |

Table B-51
Continued

ITEM 5 - S&E WITH DOCTORATE DEGREES, BY FIELD IN WHICH PRIMARILY EMPLOYED, 1975

| FIELD OF EMPLOYMENT | TOTAL | FULL - TIME | PART - TIME |
|---|---|---|---|
| A. ENGINEERS | 14669 | 13163 | 1506 |
| B. PHYSICAL SCIENTISTS | 21674 | 19882 | 1792 |
| C. ENVIRONMENTAL SCIENTISTS | 9010 | 8614 | 404 |
| D. MATHEMATICAL SCIENTISTS | 13110 | 12033 | 1077 |
| E. LIFE SCIENTISTS | 42116 | 38294 | 3822 |
| F. PSYCHOLOGISTS | 13647 | 11269 | 2378 |
| G. SOCIAL SCIENTISTS | 36107 | 32635 | 3472 |
| H. TOTAL (SUM OF A TO G) | 146341 | 131898 | 14451 |

ITEM 6 - FULL-TIME S&E, BY FIELD IN WHICH PRIMARILY EMPLOYED AND SEX, 1975

| FIELD OF EMPLOYMENT | TOTAL | MEN | WOMEN |
|---|---|---|---|
| A. ENGINEERS (TOTAL) | 22478 | 22107 | 371 |
| (1) AERO. & ASTRO. ENGRS. | 947 | 922 | 25 |
| (2) CHEMICAL ENGINEERS | 1990 | 1966 | 24 |
| (3) CIVIL ENGINEERS | 3794 | 3731 | 63 |
| (4) ELECTRICAL ENGINEERS | 5367 | 5310 | 57 |
| (5) MECHANICAL ENGINEERS | 4328 | 4298 | 30 |
| (6) OTHER ENGINEERS | 6452 | 6280 | 172 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 26833 | 24830 | 2003 |
| (1) CHEMISTS | 13963 | 12529 | 1434 |
| (2) PHYSICISTS | 10953 | 10569 | 384 |
| (3) OTHER PHYSICAL SCIENTISTS | 1937 | 1732 | 185 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 6782 | 6462 | 320 |
| (1) EARTH SCIENTISTS | 9168 | 4944 | 224 |
| (2) ATMOSPHERIC SCIENTISTS | 564 | 530 | 34 |
| (3) OCEANOGRAPHERS | 1050 | 988 | 62 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 22524 | 19996 | 2928 |
| (1) MATHEMATICIANS | 18747 | 16275 | 2472 |
| (2) COMPUTER SCIENTISTS | 3777 | 3321 | 456 |
| E. LIFE SCIENTISTS (TOTAL) | 92419 | 73155 | 19264 |
| (1) AGRICULTURAL SCIENTISTS | 13978 | 11656 | 2314 |
| (2) BIOLOGICAL SCIENTISTS | 33291 | 26933 | 6358 |
| (3) MEDICAL SCIENTISTS | 45150 | 34566 | 10592 |
| F. PSYCHOLOGISTS (TOTAL) | 16125 | 12509 | 3616 |
| G. SOCIAL SCIENTISTS (TOTAL) | 52051 | 43903 | 8148 |
| (1) ECONOMISTS | 10230 | 9356 | 874 |
| (2) SOCIOLOGISTS | 10777 | 8147 | 2630 |
| (3) POLITICAL SCIENTISTS | 8761 | 7862 | 899 |
| (4) HISTORIANS | 13572 | 11804 | 1768 |
| (5) OTHER SOCIAL SCIENTISTS | 8731 | 6754 | 1977 |
| H. TOTAL (SUM OF A TO G) | 239212 | 202562 | 36650 |

ITEM 7 - GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS, BY FIELD AND FUNCTION IN WHICH PRIMARILY ENGAGED; AND TOTAL FTE FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 19524 | 9389 | 9583 | 990 |
| (1) AERO. & ASTRO. ENGRS. | 767 | 176 | 582 | 9 |
| (2) CHEMICAL ENGINEERS | 1645 | 582 | 974 | 89 |
| (3) CIVIL ENGINEERS | 2488 | 929 | 1443 | 116 |
| (4) ELECTRICAL ENGINEERS | 3578 | 1543 | 1961 | 74 |
| (5) MECHANICAL ENGINEERS | 2290 | 971 | 1238 | 81 |
| (6) OTHER ENGINEERS | 4756 | 1188 | 3387 | 181 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 17771 | 10867 | 6423 | 481 |
| (1) CHEMISTS | 10177 | 6823 | 3041 | 313 |
| (2) PHYSICISTS | 6602 | 3646 | 2797 | 159 |
| (3) OTHER PHYSICAL SCIENTISTS | 992 | 398 | 585 | 9 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 5360 | 2342 | 2823 | 195 |
| (1) EARTH SCIENTISTS | 3939 | 2051 | 1713 | 175 |
| (2) ATMOSPHERIC SCIENTISTS | 602 | 158 | 433 | 11 |
| (3) OCEANOGRAPHERS | 819 | 133 | 677 | 9 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 8687 | 6988 | 1477 | 222 |
| (1) MATHEMATICIANS | 6966 | 6023 | 788 | 155 |
| (2) COMPUTER SCIENTISTS | 1721 | 965 | 689 | 67 |
| E. LIFE SCIENTISTS (TOTAL) | 26753 | 13570 | 11968 | 1215 |
| (1) AGRICULTURAL SCIENTISTS | 4871 | 1163 | 3560 | 148 |
| (2) BIOLOGICAL SCIENTISTS | 15644 | 9359 | 5835 | 450 |
| (3) MEDICAL SCIENTISTS | 6238 | 3048 | 2573 | 617 |
| F. PSYCHOLOGISTS (TOTAL) | 7991 | 5092 | 2213 | 686 |
| G. SOCIAL SCIENTISTS (TOTAL) | 17208 | 11591 | 4703 | 914 |
| (1) ECONOMISTS | 4289 | 2429 | 1672 | 188 |
| (2) SOCIOLOGISTS | 3035 | 2034 | 868 | 133 |
| (3) POLITICAL SCIENTISTS | 2662 | 1906 | 483 | 193 |
| (4) HISTORIANS | 3326 | 2745 | 386 | 195 |
| (5) OTHER SOCIAL SCIENTISTS | 3976 | 2477 | 1174 | 325 |
| H. TOTAL (SUM OF A TO G) | 99294 | 58839 | 39192 | 4263 |
| I. FTE DISTRIBUTION | 43662 | 23253 | 18393 | 2016 |

ITEM 8 - TECHNICIANS, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED, JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | R&D | OTHER ACTIVITIES |
|---|---|---|---|
| A. ENGINEERING TECHNICIANS | 5441 | 3006 | 2435 |
| B. PHYSICAL SCIENCE TECHS | 4892 | 2767 | 2125 |
| C. ENVIRONMENTAL SCIENCE TECHS | 1461 | 1141 | 320 |
| D. MATHEMATICS TECHNICIANS | 3905 | 1237 | 2668 |
| E. BIO. & AGR. SCIENCE TECHS | 16657 | 13292 | 3365 |
| F. MEDICAL & HEALTH-RELATED | 22447 | 13244 | 9203 |
| G. PSYCHOLOGY TECHNICIANS | 1031 | 696 | 335 |
| H. SOCIAL SCIENCE TECHS | 1248 | 723 | 525 |
| I. TOTAL (SUM OF A TO H) | 57082 | 36106 | 20976 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-52. SUMMARY DATA FOR PUBLIC INSTITUTIONS OF HIGHER EDUCATION: JANUARY 1975
(SUMMARIZED FROM NSF SURVEY FORM 724 REPRODUCED IN PART 2)

ITEM 1 - FULL-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 16424 | 13359 | 2362 | 703 |
| (1) AERO. & ASTRO. ENGRS. | 599 | 519 | 70 | 10 |
| (2) CHEMICAL ENGINEERS | 1059 | 876 | 138 | 41 |
| (3) CIVIL ENGINEERS | 2995 | 2571 | 322 | 100 |
| (4) ELECTRICAL ENGINEERS | 3583 | 3068 | 414 | 101 |
| (5) MECHANICAL ENGINEERS | 3153 | 2777 | 288 | 88 |
| (6) OTHER ENGINEERS | 5041 | 3948 | 1130 | 363 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 17619 | 14166 | 3105 | 348 |
| (1) CHEMISTS | 9047 | 7550 | 1308 | 189 |
| (2) PHYSICISTS | 7083 | 5787 | 1177 | 119 |
| (3) OTHER PHYSICAL SCIENTISTS | 1489 | 829 | 620 | 40 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 5315 | 4032 | 1162 | 121 |
| (1) EARTH SCIENTISTS | 4048 | 3401 | 554 | 93 |
| (2) ATMOSPHERIC SCIENTISTS | 458 | 275 | 167 | 16 |
| (3) OCEANOGRAPHERS | 809 | 356 | 441 | 12 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 16681 | 15247 | 817 | 617 |
| (1) MATHEMATICIANS | 13807 | 13221 | 393 | 193 |
| (2) COMPUTER SCIENTISTS | 2874 | 2026 | 424 | 424 |
| E. LIFE SCIENTISTS (TOTAL) | 63792 | 39662 | 15838 | 8292 |
| (1) AGRICULTURAL SCIENTISTS | 13580 | 3663 | 3884 | 6033 |
| (2) BIOLOGICAL SCIENTISTS | 22194 | 16018 | 5523 | 653 |
| (3) MEDICAL SCIENTISTS | 28018 | 19981 | 6431 | 1606 |
| F. PSYCHOLOGISTS (TOTAL) | 11394 | 9737 | 723 | 934 |
| G. SOCIAL SCIENTISTS (TOTAL) | 36479 | 33027 | 2351 | 1101 |
| (1) ECONOMISTS | 7056 | 5716 | 949 | 391 |
| (2) SOCIOLOGISTS | 7490 | 6945 | 391 | 154 |
| (3) POLITICAL SCIENTISTS | 5918 | 5543 | 252 | 123 |
| (4) HISTORIANS | 9183 | 8903 | 167 | 113 |
| (5) OTHER SOCIAL SCIENTISTS | 6832 | 5920 | 592 | 320 |
| H. TOTAL (SUM OF A TO G) | 167704 | 129230 | 26358 | 12116 |
| I. FTE DISTRIBUTION | 167704 | 124024 | 29814 | 13866 |

ITEM 2 - FULL-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 90283 | 71700 | 15027 | 3556 |
| B. MD., DDS., DVM., ETC. | 15761 | 12141 | 2658 | 962 |
| C. MASTER'S | 47106 | 39316 | 4355 | 3435 |
| D. BACHELOR'S OR EQUIVALENT | 14554 | 6073 | 4318 | 4163 |
| E. TOTAL (SUM A TO D) | 167704 | 129230 | 26358 | 12116 |

ITEM 3 - PART-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 3556 | 3019 | 516 | 21 |
| (1) AERO. & ASTRO. ENGRS. | 95 | 79 | 14 | 2 |
| (2) CHEMICAL ENGINEERS | 176 | 135 | 40 | 1 |
| (3) CIVIL ENGINEERS | 699 | 629 | 68 | 2 |
| (4) ELECTRICAL ENGINEERS | 858 | 787 | 66 | 5 |
| (5) MECHANICAL ENGINEERS | 673 | 598 | 72 | 3 |
| (6) OTHER ENGINEERS | 1055 | 791 | 256 | 8 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 2827 | 2237 | 562 | 28 |
| (1) CHEMISTS | 1569 | 1234 | 315 | 20 |
| (2) PHYSICISTS | 902 | 739 | 156 | 7 |
| (3) OTHER PHYSICAL SCIENTISTS | 356 | 264 | 91 | 1 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 758 | 558 | 191 | 9 |
| (1) EARTH SCIENTISTS | 584 | 480 | 98 | 6 |
| (2) ATMOSPHERIC SCIENTISTS | 78 | 42 | 36 | 0 |
| (3) OCEANOGRAPHERS | 96 | 36 | 57 | 3 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 4317 | 4189 | 112 | 16 |
| (1) MATHEMATICIANS | 3393 | 3340 | 52 | 1 |
| (2) COMPUTER SCIENTISTS | 924 | 849 | 60 | 15 |
| E. LIFE SCIENTISTS (TOTAL) | 12670 | 9789 | 2339 | 542 |
| (1) AGRICULTURAL SCIENTISTS | 967 | 556 | 308 | 103 |
| (2) BIOLOGICAL SCIENTISTS | 3078 | 2332 | 682 | 64 |
| (3) MEDICAL SCIENTISTS | 8625 | 6901 | 1349 | 375 |
| F. PSYCHOLOGISTS (TOTAL) | 3449 | 3069 | 235 | 145 |
| G. SOCIAL SCIENTISTS (TOTAL) | 7854 | 7314 | 473 | 67 |
| (1) ECONOMISTS | 1378 | 1266 | 104 | 8 |
| (2) SOCIOLOGISTS | 2219 | 2116 | 81 | 16 |
| (3) POLITICAL SCIENTISTS | 1055 | 966 | 76 | 13 |
| (4) HISTORIANS | 1383 | 1350 | 24 | 9 |
| (5) OTHER SOCIAL SCIENTISTS | 1823 | 1616 | 188 | 19 |
| H. TOTAL (SUM OF A TO G) | 35431 | 30175 | 4428 | 828 |
| I. FTE DISTRIBUTION | 13725 | 11043 | 2268 | 414 |

ITEM 4 - PART-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 8581 | 6515 | 1870 | 196 |
| B. MD., DDS., DVM., ETC. | 6814 | 5663 | 825 | 326 |
| C. MASTER'S | 14357 | 13356 | 838 | 163 |
| D. BACHELOR'S OR EQUIVALENT | 5679 | 4641 | 895 | 143 |
| E. TOTAL (SUM A TO D) | 35431 | 30175 | 4428 | 828 |

Table B-52
Continued

ITEM 5 - S&E WITH DOCTORATE DEGREES, BY FIELD IN WHICH PRIMARILY EMPLOYED, 1975

| FIELD OF EMPLOYMENT | TOTAL | FULL - TIME | PART - TIME |
|---|---|---|---|
| A. ENGINEERS | 9932 | 9073 | 859 |
| B. PHYSICAL SCIENTISTS | 13351 | 12282 | 1069 |
| C. ENVIRONMENTAL SCIENTISTS | 3866 | 3571 | 295 |
| D. MATHEMATICAL SCIENTISTS | 9084 | 8438 | 646 |
| E. LIFE SCIENTISTS | 29878 | 27345 | 2533 |
| F. PSYCHOLOGISTS | 8852 | 7596 | 1256 |
| G. SOCIAL SCIENTISTS | 23901 | 21978 | 1923 |
| H. TOTAL (SUM OF A TO G) | 98864 | 90283 | 8581 |

ITEM 6 - FULL-TIME S&E, BY FIELD IN WHICH PRIMARILY EMPLOYED AND SEX, 1975

| FIELD OF EMPLOYMENT | TOTAL | MEN | WOMEN |
|---|---|---|---|
| A. ENGINEERS (TOTAL) | 16424 | 16195 | 229 |
| (1) AERO. & ASTRO. ENGRS. | 599 | 587 | 12 |
| (2) CHEMICAL ENGINEERS | 1055 | 1046 | 9 |
| (3) CIVIL ENGINEERS | 2993 | 2947 | 46 |
| (4) ELECTRICAL ENGINEERS | 3583 | 3555 | 28 |
| (5) MECHANICAL ENGINEERS | 3153 | 3130 | 23 |
| (6) OTHER ENGINEERS | 5041 | 4930 | 111 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 17619 | 16407 | 1212 |
| (1) CHEMISTS | 9047 | 8220 | 827 |
| (2) PHYSICISTS | 7083 | 6846 | 237 |
| (3) OTHER PHYSICAL SCIENTISTS | 1489 | 1341 | 148 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 5315 | 5076 | 239 |
| (1) EARTH SCIENTISTS | 4048 | 3879 | 169 |
| (2) ATMOSPHERIC SCIENTISTS | 458 | 436 | 22 |
| (3) OCEANOGRAPHERS | 809 | 761 | 48 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 16681 | 14517 | 2164 |
| (1) MATHEMATICIANS | 13807 | 11998 | 1809 |
| (2) COMPUTER SCIENTISTS | 2874 | 2519 | 355 |
| E. LIFE SCIENTISTS (TOTAL) | 63792 | 50327 | 13465 |
| (1) AGRICULTURAL SCIENTISTS | 13580 | 11280 | 2300 |
| (2) BIOLOGICAL SCIENTISTS | 22194 | 18.15 | 3979 |
| (3) MEDICAL SCIENTISTS | 28018 | 20832 | 7186 |
| F. PSYCHOLOGISTS (TOTAL) | 11394 | 8853 | 2541 |
| G. SOCIAL SCIENTISTS (TOTAL) | 36470 | 30891 | 5588 |
| (1) ECONOMISTS | 7056 | 6436 | 620 |
| (2) SOCIOLOGISTS | 7490 | 5705 | 1785 |
| (3) POLITICAL SCIENTISTS | 5918 | 5325 | 593 |
| (4) HISTORIANS | 9183 | 8068 | 1115 |
| (5) OTHER SOCIAL SCIENTISTS | 6832 | 5357 | 1475 |
| H. TOTAL (SUM OF A TO G) | 167704 | 142266 | 25438 |

ITEM 7 - GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS, BY FIELD AND FUNCTION IN WHICH PRIMARILY ENGAGED: AND TOTAL FTE FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 10809 | 3977 | 6429 | 403 |
| (1) AERO. & ASTRO. ENGRS. | 484 | 130 | 351 | 3 |
| (2) CHEMICAL ENGINEERS | 1154 | 427 | 651 | 76 |
| (3) CIVIL ENGINEERS | 1931 | 725 | 1119 | 87 |
| (4) ELECTRICAL ENGINEERS | 2317 | 1106 | 1163 | 48 |
| (5) MECHANICAL ENGINEERS | 1676 | 772 | 858 | 46 |
| (6) OTHER ENGINEERS | 3247 | 817 | 2287 | 143 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 12545 | 8101 | 4111 | 333 |
| (1) CHEMISTS | 7420 | 5149 | 2049 | 222 |
| (2) PHYSICISTS | 4298 | 2599 | 1586 | 105 |
| (3) OTHER PHYSICAL SCIENTISTS | 835 | 353 | 476 | 6 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 4321 | 1972 | 2184 | 165 |
| (1) EARTH SCIENTISTS | 3171 | 1774 | 1244 | 153 |
| (2) ATMOSPHERIC SCIENTISTS | 492 | 93 | 396 | 3 |
| (3) OCEANOGRAPHERS | 658 | 105 | 544 | 9 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 6839 | 5722 | 947 | 170 |
| (1) MATHEMATICIANS | 5502 | 4919 | 478 | 105 |
| (2) COMPUTER SCIENTISTS | 1337 | 803 | 469 | 65 |
| E. LIFE SCIENTISTS (TOTAL) | 20936 | 10076 | 9985 | 875 |
| (1) AGRICULTURAL SCIENTISTS | 4616 | 1056 | 3614 | 146 |
| (2) BIOLOGICAL SCIENTISTS | 12449 | 7426 | 4637 | 386 |
| (3) MEDICAL SCIENTISTS | 3871 | 1594 | 1934 | 343 |
| F. PSYCHOLOGISTS (TOTAL) | 6271 | 4028 | 1687 | 556 |
| G. SOCIAL SCIENTISTS (TOTAL) | 13689 | 9385 | 3544 | 760 |
| (1) ECONOMISTS | 3325 | 1893 | 1356 | 76 |
| (2) SOCIOLOGISTS | 2368 | 1654 | 605 | 109 |
| (3) POLITICAL SCIENTISTS | 2054 | 1526 | 435 | 93 |
| (4) HISTORIANS | 2661 | 2215 | 270 | 176 |
| (5) OTHER SOCIAL SCIENTISTS | 3281 | 2097 | 880 | 304 |
| H. TOTAL (SUM OF A TO G) | 75410 | 43281 | 28887 | 3262 |
| I. FTE DISTRIBUTION | 32745 | 17873 | 13326 | 1546 |

ITEM 8 - TECHNICIANS, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED, JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | R&D | OTHER ACTIVITIES |
|---|---|---|---|
| A. ENGINEERING TECHNICIANS | 3864 | 1915 | 1949 |
| B. PHYSICAL SCIENCE TECHS | 3504 | 1781 | 1723 |
| C. ENVIRONMENTAL SCIENCE TECHS | 1091 | 801 | 290 |
| D. MATHEMATICS TECHNICIANS | 2995 | 789 | 2206 |
| E. BIO. & AGR. SCIENCE TECHS | 12468 | 9643 | 2825 |
| F. MEDICAL & HEALTH-RELATED | 14111 | 7614 | 6497 |
| G. PSYCHOLOGY TECHNICIANS | 663 | 426 | 237 |
| H. SOCIAL SCIENCE TECHS | 1036 | 588 | 448 |
| I. TOTAL (SUM OF A TO H) | 39732 | 23557 | 16175 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-53

SUMMARY DATA FOR PRIVATE INSTITUTIONS OF HIGHER EDUCATION: JANUARY 1975
(SUMMARIZED FROM NSF SURVEY FORM 724 REPRODUCED IN PART 2)

ITEM 1 - FULL-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 6054 | 4184 | 1665 | 105 |
| (1) AERO. & ASTRO. ENGRS. | 348 | 172 | 176 | 0 |
| (2) CHEMICAL ENGINEERS | 535 | 392 | 129 | 14 |
| (3) CIVIL ENGINEERS | 801 | 672 | 112 | 17 |
| (4) ELECTRICAL ENGINEERS | 1784 | 1227 | 496 | 61 |
| (5) MECHANICAL ENGINEERS | 1175 | 904 | 242 | 29 |
| (6) OTHER ENGINEERS | 1411 | 817 | 530 | 64 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 9214 | 6694 | 2402 | 118 |
| (1) CHEMISTS | 4896 | 3658 | 1164 | 74 |
| (2) PHYSICISTS | 3870 | 2802 | 1038 | 30 |
| (3) OTHER PHYSICAL SCIENTISTS | 448 | 234 | 200 | 14 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 1467 | 956 | 487 | 24 |
| (1) EARTH SCIENTISTS | 1120 | 853 | 251 | 16 |
| (2) ATMOSPHERIC SCIENTISTS | 106 | 48 | 55 | 3 |
| (3) OCEANOGRAPHERS | 241 | 55 | 181 | 5 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 5843 | 5159 | 551 | 133 |
| (1) MATHEMATICIANS | 4940 | 4585 | 326 | 29 |
| (2) COMPUTER SCIENTISTS | 903 | 574 | 225 | 104 |
| E. LIFE SCIENTISTS (TOTAL) | 28627 | 16726 | 10509 | 1392 |
| (1) AGRICULTURAL SCIENTISTS | 390 | 210 | 105 | 75 |
| (2) BIOLOGICAL SCIENTISTS | 11097 | 6982 | 3947 | 168 |
| (3) MEDICAL SCIENTISTS | 17140 | 9534 | 6457 | 1149 |
| F. PSYCHOLOGISTS (TOTAL) | 4731 | 4046 | 408 | 277 |
| G. SOCIAL SCIENTISTS (TOTAL) | 19572 | 14529 | 799 | 244 |
| (1) ECONOMISTS | 3174 | 2972 | 155 | 47 |
| (2) SOCIOLOGISTS | 3287 | 3030 | 197 | 60 |
| (3) POLITICAL SCIENTISTS | 2823 | 2664 | 120 | 39 |
| (4) HISTORIANS | 4389 | 4279 | 69 | 41 |
| (5) OTHER SOCIAL SCIENTISTS | 1899 | 1584 | 258 | 57 |
| H. TOTAL (SUM OF A TO G) | 71508 | 52294 | 16841 | 2373 |
| I. FTE DISTRIBUTION | 71508 | 49430 | 19280 | 2798 |

ITEM 2 - FULL-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 41607 | 32081 | 8814 | 764 |
| B. MD., DDS., DVM., ETC. | 13843 | 8171 | 4679 | 993 |
| C. MASTER'S | 12470 | 10663 | 1368 | 439 |
| D. BACHELOR'S OR EQUIVALENT | 3588 | 1379 | 1982 | 227 |
| E. TOTAL (SUM A TO D) | 71508 | 52294 | 16841 | 2373 |

ITEM 3 - PART-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 1628 | 1357 | 247 | 24 |
| (1) AERO. & ASTRO. ENGRS. | 57 | 33 | 24 | 0 |
| (2) CHEMICAL ENGINEERS | 76 | 56 | 19 | 1 |
| (3) CIVIL ENGINEERS | 305 | 284 | 19 | 2 |
| (4) ELECTRICAL ENGINEERS | 476 | 395 | 78 | 3 |
| (5) MECHANICAL ENGINEERS | 257 | 229 | 27 | 1 |
| (6) OTHER ENGINEERS | 457 | 360 | 80 | 17 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 1304 | 1100 | 187 | 17 |
| (1) CHEMISTS | 741 | 626 | 106 | 9 |
| (2) PHYSICISTS | 456 | 390 | 61 | 5 |
| (3) OTHER PHYSICAL SCIENTISTS | 107 | 84 | 20 | 3 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 277 | 234 | 39 | 4 |
| (1) EARTH SCIENTISTS | 220 | 194 | 25 | 1 |
| (2) ATMOSPHERIC SCIENTISTS | 35 | 24 | 8 | 3 |
| (3) OCEANOGRAPHERS | 22 | 16 | 6 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 1604 | 1459 | 57 | 88 |
| (1) MATHEMATICIANS | 1163 | 1108 | 35 | 20 |
| (2) COMPUTER SCIENTISTS | 441 | 351 | 22 | 68 |
| E. LIFE SCIENTISTS (TOTAL) | 10835 | 9471 | 1177 | 187 |
| (1) AGRICULTURAL SCIENTISTS | 32 | 32 | 0 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 1651 | 1271 | 356 | 24 |
| (3) MEDICAL SCIENTISTS | 9152 | 8168 | 821 | 163 |
| F. PSYCHOLOGISTS (TOTAL) | 2153 | 1972 | 90 | 91 |
| G. SOCIAL SCIENTISTS (TOTAL) | 4749 | 4482 | 181 | 86 |
| (1) ECONOMISTS | 1105 | 1040 | 28 | 37 |
| (2) SOCIOLOGISTS | 1211 | 1158 | 39 | 14 |
| (3) POLITICAL SCIENTISTS | 809 | 756 | 36 | 17 |
| (4) HISTORIANS | 803 | 778 | 12 | 13 |
| (5) OTHER SOCIAL SCIENTISTS | 821 | 790 | 66 | 5 |
| H. TOTAL (SUM OF A TO G) | 22550 | 20075 | 1978 | 497 |
| I. FTE DISTRIBUTION | 7869 | 6459 | 1200 | 210 |

ITEM 4 - PART-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 5870 | 5001 | 743 | 126 |
| B. MD., DDS., DVM., ETC. | 8678 | 7893 | 487 | 138 |
| C. MASTER'S | 6612 | 6050 | 381 | 181 |
| D. BACHELOR'S OR EQUIVALENT | 1390 | 1171 | 367 | 52 |
| E. TOTAL (SUM A TO D) | 22550 | 20075 | 1978 | 497 |

Table B-53
Continued

ITEM 5 - S&E WITH DOCTORATE DEGREES, BY FIELD IN WHICH PRIMARILY EMPLOYED, 1975

| FIELD OF EMPLOYMENT | TOTAL | FULL - TIME | PART - TIME |
|---|---|---|---|
| A. ENGINEERS | 4737 | 4090 | 647 |
| B. PHYSICAL SCIENTISTS | 8323 | 7600 | 723 |
| C. ENVIRONMENTAL SCIENTISTS | 1152 | 1043 | 109 |
| D. MATHEMATICAL SCIENTISTS | 4826 | 3595 | 431 |
| E. LIFE SCIENTISTS | 12238 | 10949 | 1289 |
| F. PSYCHOLOGISTS | 4795 | 3673 | 1122 |
| G. SOCIAL SCIENTISTS | 12206 | 10657 | 1549 |
| H. TOTAL (SUM OF A TO G) | 47677 | 41807 | 5870 |

ITEM 6 - FULL-TIME S&E, BY FIELD IN WHICH PRIMARILY EMPLOYED AND SEX, 1975

| FIELD OF EMPLOYMENT | TOTAL | MEN | WOMEN |
|---|---|---|---|
| A. ENGINEERS (TOTAL) | 4054 | 5912 | 142 |
| (1) AERO. & ASTRO. ENGRS. | 348 | 335 | 13 |
| (2) CHEMICAL ENGINEERS | 535 | 520 | 15 |
| (3) CIVIL ENGINEERS | 801 | 784 | 17 |
| (4) ELECTRICAL ENGINEERS | 1784 | 1755 | 29 |
| (5) MECHANICAL ENGINEERS | 1175 | 1168 | 7 |
| (6) OTHER ENGINEERS | 1411 | 1350 | 61 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 9214 | 8423 | 791 |
| (1) CHEMISTS | 4896 | 4289 | 607 |
| (2) PHYSICISTS | 3870 | 3723 | 147 |
| (3) OTHER PHYSICAL SCIENTISTS | 448 | 411 | 37 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 1467 | 1386 | 81 |
| (1) EARTH SCIENTISTS | 1120 | 1069 | 51 |
| (2) ATMOSPHERIC SCIENTISTS | 106 | 94 | 12 |
| (3) OCEANOGRAPHERS | 241 | 227 | 14 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 5843 | 5079 | 764 |
| (1) MATHEMATICIANS | 4940 | 4277 | 663 |
| (2) COMPUTER SCIENTISTS | 903 | 802 | 101 |
| E. LIFE SCIENTISTS (TOTAL) | 28627 | 22828 | 5799 |
| (1) AGRICULTURAL SCIENTISTS | 390 | 376 | 14 |
| (2) BIOLOGICAL SCIENTISTS | 11097 | 8718 | 2379 |
| (3) MEDICAL SCIENTISTS | 17140 | 13734 | 3406 |
| F. PSYCHOLOGISTS (TOTAL) | 4731 | 3656 | 1075 |
| G. SOCIAL SCIENTISTS (TOTAL) | 15972 | 13012 | 2960 |
| (1) ECONOMISTS | 3174 | 2920 | 254 |
| (2) SOCIOLOGISTS | 3287 | 2442 | 845 |
| (3) POLITICAL SCIENTISTS | 2823 | 2517 | 306 |
| (4) HISTORIANS | 4389 | 3736 | 653 |
| (5) OTHER SOCIAL SCIENTISTS | 1899 | 1397 | 502 |
| H. TOTAL (SUM OF A TO G) | 71909 | 60296 | 11212 |

ITEM 7 - GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS, BY FIELD AND FUNCTION IN WHICH PRIMARILY ENGAGED: AND TOTAL FTE FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 4715 | 1412 | 3196 | 107 |
| (1) AERO. & ASTRO. ENGRS. | 283 | 46 | 231 | 6 |
| (2) CHEMICAL ENGINEERS | 491 | 155 | 323 | 13 |
| (3) CIVIL ENGINEERS | 557 | 204 | 324 | 29 |
| (4) ELECTRICAL ENGINEERS | 1261 | 437 | 798 | 26 |
| (5) MECHANICAL ENGINEERS | 614 | 199 | 380 | 35 |
| (6) OTHER ENGINEERS | 1509 | 371 | 1100 | 38 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 5226 | 2766 | 2312 | 148 |
| (1) CHEMISTS | 2757 | 1674 | 992 | 91 |
| (2) PHYSICISTS | 2312 | 1047 | 1211 | 54 |
| (3) OTHER PHYSICAL SCIENTISTS | 157 | 45 | 109 | 3 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 1039 | 370 | 639 | 30 |
| (1) EARTH SCIENTISTS | 768 | 277 | 469 | 22 |
| (2) ATMOSPHERIC SCIENTISTS | 110 | 65 | 37 | 8 |
| (3) OCEANOGRAPHERS | 161 | 28 | 133 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 1848 | 1286 | 530 | 32 |
| (1) MATHEMATICIANS | 1484 | 1104 | 310 | 50 |
| (2) COMPUTER SCIENTISTS | 384 | 162 | 220 | 2 |
| E. LIFE SCIENTISTS (TOTAL) | 5817 | 3494 | 1983 | 340 |
| (1) AGRICULTURAL SCIENTISTS | 253 | 107 | 146 | 2 |
| (2) BIOLOGICAL SCIENTISTS | 3195 | 1933 | 1198 | 64 |
| (3) MEDICAL SCIENTISTS | 2367 | 1454 | 639 | 274 |
| F. PSYCHOLOGISTS (TOTAL) | 1720 | 1044 | 526 | 130 |
| G. SOCIAL SCIENTISTS (TOTAL) | 3519 | 2206 | 1159 | 154 |
| (1) ECONOMISTS | 884 | 536 | 318 | 30 |
| (2) SOCIOLOGISTS | 667 | 380 | 283 | 24 |
| (3) POLITICAL SCIENTISTS | 628 | 380 | 168 | 40 |
| (4) HISTORIANS | 665 | 530 | 116 | 19 |
| (5) OTHER SOCIAL SCIENTISTS | 695 | 380 | 294 | 21 |
| H. TOTAL (SUM OF A TO G) | 23884 | 12578 | 10305 | 1001 |
| I. FTE DISTRIBUTION | 10917 | 5380 | 5067 | 470 |

ITEM 8 - TECHNICIANS, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED, JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | R&D | OTHER ACTIVITIES |
|---|---|---|---|
| A. ENGINEERING TECHNICIANS | 1577 | 1091 | 486 |
| B. PHYSICAL SCIENCE TECHS | 1388 | 986 | 402 |
| C. ENVIRONMENTAL SCIENCE TECHS | 370 | 348 | 38 |
| D. MATHEMATICS TECHNICIANS | 910 | 448 | 462 |
| E. BIO. & AGR. SCIENCE TECHS | 4189 | 3049 | 540 |
| F. MEDICAL & HEALTH-RELATED | 8336 | 5630 | 2706 |
| G. PSYCHOLOGY TECHNICIANS | 368 | 270 | 98 |
| H. SOCIAL SCIENCE TECHS | 212 | 135 | 77 |
| I. TOTAL (SUM OF A TO H) | 17350 | 12549 | 4801 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-54. SUMMARY DATA FOR INSTITUTIONS AWARDING DOCTORATE DEGREES IN THE SCIENCES OR ENGINEERING: JANUARY 1975
(SUMMARIZED FROM NSF SURVEY FORM 724 REPRODUCED IN PART 2)

ITEM 1 - FULL-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 16611 | 11908 | 3945 | 758 |
| (1) AERO. & ASTRO. ENGRS. | 795 | 540 | 245 | 10 |
| (2) CHEMICAL ENGINEERS | 1389 | 1076 | 264 | 49 |
| (3) CIVIL ENGINEERS | 2717 | 2208 | 422 | 87 |
| (4) ELECTRICAL ENGINEERS | 3568 | 2558 | 890 | 120 |
| (5) MECHANICAL ENGINEERS | 2898 | 2301 | 505 | 92 |
| (6) OTHER ENGINEERS | 5244 | 3225 | 1619 | 400 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 14940 | 9315 | 5298 | 327 |
| (1) CHEMISTS | 7163 | 4639 | 2354 | 170 |
| (2) PHYSICISTS | 6511 | 4257 | 2132 | 122 |
| (3) OTHER PHYSICAL SCIENTISTS | 1266 | 419 | 812 | 35 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 4383 | 2666 | 1594 | 123 |
| (1) EARTH SCIENTISTS | 3018 | 2163 | 766 | 89 |
| (2) ATMOSPHERIC SCIENTISTS | 463 | 224 | 222 | 17 |
| (3) OCEANOGRAPHERS | 902 | 279 | 606 | 17 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 9886 | 8116 | 1275 | 495 |
| (1) MATHEMATICIANS | 7825 | 7009 | 673 | 143 |
| (2) COMPUTER SCIENTISTS | 2061 | 1107 | 602 | 352 |
| E. LIFE SCIENTISTS (TOTAL) | 77536 | 41975 | 26098 | 9462 |
| (1) AGRICULTURAL SCIENTISTS | 12580 | 2568 | 3953 | 6159 |
| (2) BIOLOGICAL SCIENTISTS | 22538 | 12532 | 9271 | 735 |
| (3) MEDICAL SCIENTISTS | 42418 | 26876 | 12874 | 2668 |
| F. PSYCHOLOGISTS (TOTAL) | 7220 | 5631 | 1060 | 529 |
| G. SOCIAL SCIENTISTS (TOTAL) | 24346 | 20446 | 2911 | 989 |
| (1) ECONOMISTS | 5682 | 4234 | 1061 | 387 |
| (2) SOCIOLOGISTS | 4619 | 3927 | 541 | 151 |
| (3) POLITICAL SCIENTISTS | 4074 | 3627 | 344 | 103 |
| (4) HISTORIANS | 4768 | 4496 | 193 | 79 |
| (5) OTHER SOCIAL SCIENTISTS | 5203 | 4162 | 772 | 269 |
| H. TOTAL (SUM OF A TO G) | 154922 | 100058 | 42181 | 12683 |
| I. FTE DISTRIBUTION | 154922 | 92658 | 47519 | 14745 |

ITEM 2 - FULL-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 91413 | 64814 | 23199 | 3400 |
| B. MD., DOS., DVM., ETC. | 28827 | 19572 | 7332 | 1923 |
| C. MASTER'S | 21270 | 12767 | 5402 | 3021 |
| D. BACHELOR'S OR EQUIVALENT | 13412 | 3105 | 6168 | 4139 |
| E. TOTAL (SUM A TO D) | 154922 | 100058 | 42181 | 12683 |

ITEM 3 - PART-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 2917 | 2122 | 757 | 38 |
| (1) AERO. & ASTRO. ENGRS. | 99 | 59 | 38 | 2 |
| (2) CHEMICAL ENGINEERS | 198 | 137 | 59 | 2 |
| (3) CIVIL ENGINEERS | 543 | 454 | 86 | 3 |
| (4) ELECTRICAL ENGINEERS | 669 | 519 | 142 | 8 |
| (5) MECHANICAL ENGINEERS | 408 | 306 | 98 | 4 |
| (6) OTHER ENGINEERS | 1000 | 647 | 334 | 19 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 1858 | 1102 | 722 | 34 |
| (1) CHEMISTS | 1053 | 626 | 405 | 22 |
| (2) PHYSICISTS | 624 | 407 | 208 | 9 |
| (3) OTHER PHYSICAL SCIENTISTS | 181 | 69 | 109 | 3 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 532 | 302 | 218 | 12 |
| (1) EARTH SCIENTISTS | 363 | 242 | 115 | 6 |
| (2) ATMOSPHERIC SCIENTISTS | 82 | 35 | 44 | 3 |
| (3) OCEANOGRAPHERS | 87 | 25 | 59 | 3 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 1741 | 1494 | 155 | 92 |
| (1) MATHEMATICIANS | 1193 | 1101 | 78 | 14 |
| (2) COMPUTER SCIENTISTS | 548 | 393 | 77 | 78 |
| E. LIFE SCIENTISTS (TOTAL) | 19934 | 15777 | 3479 | 678 |
| (1) AGRICULTURAL SCIENTISTS | 744 | 337 | 306 | 101 |
| (2) BIOLOGICAL SCIENTISTS | 2693 | 1617 | 1004 | 72 |
| (3) MEDICAL SCIENTISTS | 16497 | 13823 | 2169 | 505 |
| F. PSYCHOLOGISTS (TOTAL) | 2087 | 1623 | 309 | 155 |
| G. SOCIAL SCIENTISTS (TOTAL) | 4493 | 3741 | 637 | 115 |
| (1) ECONOMISTS | 890 | 717 | 129 | 44 |
| (2) SOCIOLOGISTS | 1045 | 919 | 113 | 13 |
| (3) POLITICAL SCIENTISTS | 748 | 611 | 111 | 26 |
| (4) HISTORIANS | 626 | 580 | 36 | 10 |
| (5) OTHER SOCIAL SCIENTISTS | 1184 | 914 | 248 | 22 |
| H. TOTAL (SUM OF A TO G) | 33562 | 26161 | 6277 | 1124 |
| I. FTE DISTRIBUTION | 13001 | 9030 | 3412 | 559 |

ITEM 4 - PART-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 9211 | 6399 | 2564 | 248 |
| B. MD., DOS., DVM., ETC. | 14536 | 12782 | 1311 | 443 |
| C. MASTER'S | 6679 | 5223 | 1194 | 262 |
| D. BACHELOR'S OR EQUIVALENT | 3136 | 1757 | 1208 | 171 |
| E. TOTAL (SUM A TO D) | 33562 | 26161 | 6277 | 1124 |

Table B-5L
Continued

ITEM 5 - S&E WITH DOCTORATE DEGREES, BY FIELD IN WHICH PRIMARILY EMPLOYED, 1975

| FIELD OF EMPLOYMENT | TOTAL | FULL - TIME | PART - TIME |
|---|---|---|---|
| A. ENGINEERS | 13094 | 11789 | 1265 |
| B. PHYSICAL SCIENTISTS | 13615 | 12627 | 988 |
| C. ENVIRONMENTAL SCIENTISTS | 3671 | 3384 | 287 |
| D. MATHEMATICAL SCIENTISTS | 8160 | 7556 | 604 |
| E. LIFE SCIENTISTS | 34502 | 31410 | 3092 |
| F. PSYCHOLOGISTS | 7142 | 5959 | 1183 |
| G. SOCIAL SCIENTISTS | 20480 | 18688 | 1792 |
| H. TOTAL (SUM OF A TO G) | 100624 | 91413 | 9211 |

ITEM 6 - FULL-TIME S&E, BY FIELD IN WHICH PRIMARILY EMPLOYED AND SEX, 1975

| FIELD OF EMPLOYMENT | TOTAL | MEN | WOMEN |
|---|---|---|---|
| A. ENGINEERS (TOTAL) | 14611 | 14293 | 318 |
| (1) AERO. & ASTRO. ENGRS. | 795 | 777 | 18 |
| (2) CHEMICAL ENGINEERS | 1389 | 1368 | 21 |
| (3) CIVIL ENGINEERS | 2717 | 2666 | 51 |
| (4) ELECTRICAL ENGINEERS | 3568 | 3522 | 46 |
| (5) MECHANICAL ENGINEERS | 2898 | 2873 | 25 |
| (6) OTHER ENGINEERS | 5244 | 5087 | 157 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 14940 | 14111 | 829 |
| (1) CHEMISTS | 7163 | 6642 | 521 |
| (2) PHYSICISTS | 6911 | 6321 | 590 |
| (3) OTHER PHYSICAL SCIENTISTS | 1266 | 1148 | 118 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 4383 | 4103 | 280 |
| (1) EARTH SCIENTISTS | 3818 | 3698 | 120 |
| (2) ATMOSPHERIC SCIENTISTS | 463 | 435 | 28 |
| (3) OCEANOGRAPHERS | 902 | 850 | 52 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 9886 | 9809 | 877 |
| (1) MATHEMATICIANS | 7825 | 7194 | 631 |
| (2) COMPUTER SCIENTISTS | 2061 | 1815 | 246 |
| E. LIFE SCIENTISTS (TOTAL) | 77536 | 62278 | 15258 |
| (1) AGRICULTURAL SCIENTISTS | 12580 | 10334 | 2246 |
| (2) BIOLOGICAL SCIENTISTS | 22538 | 18371 | 4167 |
| (3) MEDICAL SCIENTISTS | 42418 | 33573 | 8845 |
| F. PSYCHOLOGISTS (TOTAL) | 7220 | 5759 | 1461 |
| G. SOCIAL SCIENTISTS (TOTAL) | 24346 | 20815 | 3531 |
| (1) ECONOMISTS | 5682 | 5239 | 443 |
| (2) SOCIOLOGISTS | 4619 | 3572 | 1047 |
| (3) POLITICAL SCIENTISTS | 4074 | 3692 | 382 |
| (4) HISTORIANS | 4768 | 4297 | 471 |
| (5) OTHER SOCIAL SCIENTISTS | 5203 | 4017 | 1186 |
| H. TOTAL (SUM OF A TO G) | 154922 | 132448 | 22474 |

ITEM 7 - GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS, BY FIELD AND FUNCTION IN WHICH PRIMARILY ENGAGED: AND TOTAL FTE FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 15320 | 5238 | 9547 | 535 |
| (1) AERO. & ASTRO. ENGRS. | 762 | 173 | 582 | 7 |
| (2) CHEMICAL ENGINEERS | 1628 | 571 | 968 | 89 |
| (3) CIVIL ENGINEERS | 2644 | 982 | 1631 | 111 |
| (4) ELECTRICAL ENGINEERS | 3511 | 1487 | 1952 | 72 |
| (5) MECHANICAL ENGINEERS | 2248 | 936 | 1231 | 81 |
| (6) OTHER ENGINEERS | 4727 | 1169 | 3383 | 175 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 16889 | 10111 | 6304 | 474 |
| (1) CHEMISTS | 9358 | 6293 | 2994 | 471 |
| (2) PHYSICISTS | 6362 | 3449 | 2787 | 126 |
| (3) OTHER PHYSICAL SCIENTISTS | 969 | 379 | 583 | 7 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 5143 | 2191 | 2790 | 162 |
| (1) EARTH SCIENTISTS | 3756 | 1914 | 1699 | 143 |
| (2) ATMOSPHERIC SCIENTISTS | 599 | 136 | 433 | 10 |
| (3) OCEANOGRAPHERS | 788 | 121 | 658 | 9 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 8819 | 6661 | 1492 | 166 |
| (1) MATHEMATICIANS | 6423 | 5593 | 771 | 109 |
| (2) COMPUTER SCIENTISTS | 1656 | 918 | 681 | 57 |
| E. LIFE SCIENTISTS (TOTAL) | 25481 | 12553 | 11783 | 1085 |
| (1) AGRICULTURAL SCIENTISTS | 4797 | 1135 | 3523 | 139 |
| (2) BIOLOGICAL SCIENTISTS | 14409 | 8375 | 5698 | 346 |
| (3) MEDICAL SCIENTISTS | 6195 | 3025 | 2970 | 600 |
| F. PSYCHOLOGISTS (TOTAL) | 7140 | 4444 | 2131 | 565 |
| G. SOCIAL SCIENTISTS (TOTAL) | 16068 | 10761 | 4568 | 739 |
| (1) ECONOMISTS | 4064 | 2311 | 1647 | 86 |
| (2) SOCIOLOGISTS | 2805 | 1849 | 847 | 109 |
| (3) POLITICAL SCIENTISTS | 2454 | 1767 | 581 | 126 |
| (4) HISTORIANS | 2972 | 2523 | 344 | 112 |
| (5) OTHER SOCIAL SCIENTISTS | 3766 | 2331 | 1129 | 306 |
| H. TOTAL (SUM OF A TO G) | 94860 | 51739 | 38635 | 3486 |
| I. FTE DISTRIBUTION | 41804 | 21780 | 18197 | 1827 |

ITEM 8 - TECHNICIANS, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED, JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | R&D | OTHER ACTIVITIES |
|---|---|---|---|
| A. ENGINEERING TECHNICIANS | 4421 | 2872 | 1549 |
| B. PHYSICAL SCIENCE TECHS | 3925 | 2626 | 1299 |
| C. ENVIRONMENTAL SCIENCE TECHS | 1337 | 1111 | 226 |
| D. MATHEMATICS TECHNICIANS | 2667 | 1043 | 1624 |
| E. BIO. & AGR. SCIENCE TECHS | 15587 | 13055 | 2532 |
| F. MEDICAL & HEALTH-RELATED | 22018 | 13191 | 8827 |
| G. PSYCHOLOGY TECHNICIANS | 871 | 665 | 206 |
| H. SOCIAL SCIENCE TECHS | 1130 | 683 | 447 |
| I. TOTAL (SUM OF A TO H) | 51956 | 35246 | 16710 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-55.

SUMMARY DATA FOR INSTITUTIONS AWARDING MASTER'S DEGREES IN THE SCIENCES OR ENGINEERING: JANUARY 1975
(SUMMARIZED FROM NSF SURVEY FORM 724 REPRODUCED IN PART 2)

ITEM 1 - FULL-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 1678 | 1580 | 56 | 42 |
| (1) AERO. & ASTRO. ENGRS. | 35 | 35 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 89 | 81 | 3 | 5 |
| (3) CIVIL ENGINEERS | 338 | 324 | 6 | 8 |
| (4) ELECTRICAL ENGINEERS | 456 | 427 | 11 | 18 |
| (5) MECHANICAL ENGINEERS | 406 | 387 | 11 | 8 |
| (6) OTHER ENGINEERS | 354 | 326 | 25 | 3 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 4057 | 3885 | 119 | 53 |
| (1) CHEMISTS | 2277 | 2168 | 75 | 34 |
| (2) PHYSICISTS | 1569 | 1517 | 37 | 15 |
| (3) OTHER PHYSICAL SCIENTISTS | 211 | 200 | 7 | 4 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 1123 | 1072 | 40 | 11 |
| (1) EARTH SCIENTISTS | 1023 | 984 | 28 | 11 |
| (2) ATMOSPHERIC SCIENTISTS | 49 | 49 | 0 | 0 |
| (3) OCEANOGRAPHERS | 51 | 39 | 12 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 4196 | 4056 | 34 | 106 |
| (1) MATHEMATICIANS | 3663 | 3619 | 22 | 22 |
| (2) COMPUTER SCIENTISTS | 533 | 437 | 12 | 84 |
| E. LIFE SCIENTISTS (TOTAL) | 4732 | 4485 | 161 | 86 |
| (1) AGRICULTURAL SCIENTISTS | 571 | 522 | 27 | 22 |
| (2) BIOLOGICAL SCIENTISTS | 3663 | 3505 | 125 | 33 |
| (3) MEDICAL SCIENTISTS | 498 | 458 | 9 | 31 |
| F. PSYCHOLOGISTS (TOTAL) | 3742 | 3464 | 40 | 238 |
| G. SOCIAL SCIENTISTS (TOTAL) | 11147 | 10886 | 131 | 130 |
| (1) ECONOMISTS | 1805 | 1760 | 23 | 22 |
| (2) SOCIOLOGISTS | 2436 | 2388 | 21 | 27 |
| (3) POLITICAL SCIENTISTS | 1910 | 1875 | 14 | 21 |
| (4) HISTORIANS | 3311 | 3258 | 25 | 28 |
| (5) OTHER SOCIAL SCIENTISTS | 1685 | 1605 | 48 | 32 |
| H. TOTAL (SUM OF A TO G) | 30675 | 29428 | 581 | 666 |
| I. FTE DISTRIBUTION | 30675 | 28936 | 996 | 743 |

ITEM 2 - FULL-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 21130 | 20361 | 415 | 354 |
| B. M.D., D.D.S., D.V.M., ETC. | 176 | 159 | 3 | 14 |
| C. MASTER'S | 8665 | 8336 | 103 | 226 |
| D. BACHELOR'S OR EQUIVALENT | 704 | 572 | 60 | 72 |
| E. TOTAL (SUM A TO D) | 30675 | 29428 | 581 | 666 |

ITEM 3 - PART-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 509 | 504 | 4 | 1 |
| (1) AERO. & ASTRO. ENGRS. | 25 | 25 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 14 | 14 | 0 | 0 |
| (3) CIVIL ENGINEERS | 112 | 112 | 0 | 0 |
| (4) ELECTRICAL ENGINEERS | 114 | 112 | 2 | 0 |
| (5) MECHANICAL ENGINEERS | 111 | 110 | 1 | 0 |
| (6) OTHER ENGINEERS | 133 | 131 | 1 | 1 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 712 | 697 | 13 | 2 |
| (1) CHEMISTS | 368 | 358 | 9 | 1 |
| (2) PHYSICISTS | 271 | 268 | 2 | 1 |
| (3) OTHER PHYSICAL SCIENTISTS | 73 | 71 | 2 | 0 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 168 | 155 | 12 | 1 |
| (1) EARTH SCIENTISTS | 141 | 132 | 8 | 1 |
| (2) ATMOSPHERIC SCIENTISTS | 11 | 11 | 0 | 0 |
| (3) OCEANOGRAPHERS | 16 | 12 | 4 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 893 | 887 | 3 | 2 |
| (1) MATHEMATICIANS | 726 | 724 | 2 | 0 |
| (2) COMPUTER SCIENTISTS | 166 | 163 | 1 | 2 |
| E. LIFE SCIENTISTS (TOTAL) | 923 | 889 | 20 | 14 |
| (1) AGRICULTURAL SCIENTISTS | 76 | 74 | 2 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 620 | 601 | 18 | 1 |
| (3) MEDICAL SCIENTISTS | 227 | 214 | 0 | 13 |
| F. PSYCHOLOGISTS (TOTAL) | 1209 | 1165 | 10 | 34 |
| G. SOCIAL SCIENTISTS (TOTAL) | 2422 | 2407 | 5 | 10 |
| (1) ECONOMISTS | 604 | 603 | 1 | 0 |
| (2) SOCIOLOGISTS | 630 | 626 | 0 | 4 |
| (3) POLITICAL SCIENTISTS | 389 | 387 | 0 | 2 |
| (4) HISTORIANS | 358 | 355 | 0 | 3 |
| (5) OTHER SOCIAL SCIENTISTS | 441 | 436 | 4 | 1 |
| H. TOTAL (SUM OF A TO G) | 6835 | 6704 | 67 | 64 |
| I. FTE DISTRIBUTION | 2699 | 2652 | 29 | 18 |

ITEM 4 - PART-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 2248 | 2189 | 27 | 32 |
| B. M.D., D.D.S., D.V.M., ETC. | 91 | 85 | 1 | 5 |
| C. MASTER'S | 3358 | 3314 | 15 | 21 |
| D. BACHELOR'S OR EQUIVALENT | 1146 | 1116 | 24 | 6 |
| E. TOTAL (SUM A TO D) | 6835 | 6704 | 67 | 64 |

Table B-55
Continued

ITEM 5 - S&E WITH DOCTORATE DEGREES, BY FIELD IN WHICH PRIMARILY EMPLOYED: 1975

| FIELD OF EMPLOYMENT | TOTAL | FULL - TIME | PART - TIME |
|---|---|---|---|
| A. ENGINEERS | 1064 | 909 | 157 |
| B. PHYSICAL SCIENTISTS | 3588 | 3284 | 304 |
| C. ENVIRONMENTAL SCIENTISTS | 857 | 792 | 65 |
| D. MATHEMATICAL SCIENTISTS | 2691 | 2468 | 223 |
| E. LIFE SCIENTISTS | 5639 | 5385 | 254 |
| F. PSYCHOLOGISTS | 3441 | 2892 | 549 |
| G. SOCIAL SCIENTISTS | 6096 | 7410 | 686 |
| H. TOTAL (SUM OF A TO G) | 23378 | 21130 | 2248 |

ITEM 6 - FULL-TIME S&E, BY FIELD IN WHICH PRIMARILY EMPLOYED AND SEX, 1975

| FIELD OF EMPLOYMENT | TOTAL | MEN | WOMEN |
|---|---|---|---|
| A. ENGINEERS (TOTAL) | 1678 | 1664 | 14 |
| (1) AERO. & ASTRO. ENGRS. | 35 | 35 | 0 |
| (2) CHEMICAL ENGINEERS | 89 | 88 | 1 |
| (3) CIVIL ENGINEERS | 338 | 334 | 4 |
| (4) ELECTRICAL ENGINEERS | 456 | 449 | 7 |
| (5) MECHANICAL ENGINEERS | 406 | 406 | 0 |
| (6) OTHER ENGINEERS | 354 | 352 | 2 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 4057 | 3757 | 300 |
| (1) CHEMISTS | 2277 | 2053 | 224 |
| (2) PHYSICISTS | 1569 | 1519 | 50 |
| (3) OTHER PHYSICAL SCIENTISTS | 211 | 185 | 26 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 1123 | 1066 | 57 |
| (1) EARTH SCIENTISTS | 1029 | 973 | 56 |
| (2) ATMOSPHERIC SCIENTISTS | 49 | 45 | 4 |
| (3) OCEANOGRAPHERS | 51 | 48 | 3 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 4196 | 3635 | 561 |
| (1) MATHEMATICIANS | 3663 | 3155 | 508 |
| (2) COMPUTER SCIENTISTS | 533 | 480 | 53 |
| E. LIFE SCIENTISTS (TOTAL) | 4732 | 3890 | 842 |
| (1) AGRICULTURAL SCIENTISTS | 571 | 532 | 39 |
| (2) BIOLOGICAL SCIENTISTS | 3663 | 3084 | 579 |
| (3) MEDICAL SCIENTISTS | 498 | 274 | 224 |
| F. PSYCHOLOGISTS (TOTAL) | 3762 | 2903 | 859 |
| G. SOCIAL SCIENTISTS (TOTAL) | 11147 | 9410 | 1737 |
| (1) ECONOMISTS | 1803 | 1642 | 161 |
| (2) SOCIOLOGISTS | 2136 | 1859 | 277 |
| (3) POLITICAL SCIENTISTS | 1910 | 1701 | 209 |
| (4) HISTORIANS | 5311 | 4878 | 433 |
| (5) OTHER SOCIAL SCIENTISTS | 1469 | 1330 | 355 |
| H. TOTAL (SUM OF A TO G) | 30679 | 26325 | 4390 |

ITEM 7 - GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS, BY FIELD AND FUNCTION IN WHICH PRIMARILY ENGAGED; AND TOTAL FTE FUNCTION: 1973

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 204 | 151 | 38 | 15 |
| (1) AERO. & ASTRO. ENGRS. | 5 | 3 | 0 | 2 |
| (2) CHEMICAL ENGINEERS | 17 | 11 | 6 | 0 |
| (3) CIVIL ENGINEERS | 44 | 27 | 12 | 5 |
| (4) ELECTRICAL ENGINEERS | 67 | 56 | 9 | 2 |
| (5) MECHANICAL ENGINEERS | 42 | 35 | 7 | 0 |
| (6) OTHER ENGINEERS | 29 | 19 | 4 | 6 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 482 | 356 | 59 | 67 |
| (1) CHEMISTS | 319 | 230 | 47 | 42 |
| (2) PHYSICISTS | 260 | 207 | 10 | 23 |
| (3) OTHER PHYSICAL SCIENTISTS | 23 | 19 | 2 | 2 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 217 | 151 | 33 | 33 |
| (1) EARTH SCIENTISTS | 183 | 137 | 14 | 32 |
| (2) ATMOSPHERIC SCIENTISTS | 3 | 2 | 0 | 1 |
| (3) OCEANOGRAPHERS | 31 | 12 | 19 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 450 | 327 | 29 | 94 |
| (1) MATHEMATICIANS | 343 | 280 | 17 | 46 |
| (2) COMPUTER SCIENTISTS | 65 | 47 | 8 | 10 |
| E. LIFE SCIENTISTS (TOTAL) | 1392 | 1037 | 105 | 130 |
| (1) AGRICULTURAL SCIENTISTS | 74 | 28 | 37 | 9 |
| (2) BIOLOGICAL SCIENTISTS | 1235 | 906 | 165 | 164 |
| (3) MEDICAL SCIENTISTS | 43 | 23 | 3 | 17 |
| F. PSYCHOLOGISTS (TOTAL) | 851 | 648 | 82 | 121 |
| G. SOCIAL SCIENTISTS (TOTAL) | 1140 | 830 | 135 | 175 |
| (1) ECONOMISTS | 165 | 118 | 9 | 22 |
| (2) SOCIOLOGISTS | 230 | 185 | 21 | 24 |
| (3) POLITICAL SCIENTISTS | 288 | 159 | 22 | 27 |
| (4) HISTORIANS | 547 | 222 | 42 | 83 |
| (5) OTHER SOCIAL SCIENTISTS | 210 | 146 | 43 | 19 |
| H. TOTAL (SUM OF A TO G) | 5254 | 4100 | 997 | 997 |
| I. FTE DISTRIBUTION | 1858 | 1473 | 196 | 189 |

ITEM 8 - TECHNICIANS, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED, JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | R&D | OTHER ACTIVITIES |
|---|---|---|---|
| A. ENGINEERING TECHNICIANS | 295 | 65 | 230 |
| B. PHYSICAL SCIENCE TECHS | 424 | 88 | 336 |
| C. ENVIRONMENTAL SCIENCE TECHS | 68 | 24 | 44 |
| D. MATHEMATICS TECHNICIANS | 416 | 82 | 334 |
| E. BIO. & AGR. SCIENCE TECHS | 433 | 139 | 294 |
| F. MEDICAL & HEALTH-RELATED | 183 | 16 | 67 |
| G. PSYCHOLOGY TECHNICIANS | 101 | 24 | 77 |
| H. SOCIAL SCIENCE TECHS | 47 | 18 | 29 |
| I. TOTAL (SUM OF A TO H) | 1887 | 456 | 1431 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-56. SUMMARY DATA FOR INSTITUTIONS AWARDING BACHELOR'S DEGREES IN THE SCIENCES OR ENGINEERING: JANUARY 1975
(SUMMARIZED FROM NSF SURVEY FORM 724 REPRODUCED IN PART 2)

ITEM 1 - FULL-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 1357 | 1291 | 30 | 36 |
| (1) AERO. & ASTRO. ENGRS. | 63 | 62 | 1 | 0 |
| (2) CHEMICAL ENGINEERS | 38 | 37 | 0 | 1 |
| (3) CIVIL ENGINEERS | 185 | 167 | 2 | 16 |
| (4) ELECTRICAL ENGINEERS | 412 | 392 | 9 | 11 |
| (5) MECHANICAL ENGINEERS | 355 | 345 | 7 | 3 |
| (6) OTHER ENGINEERS | 306 | 288 | 11 | 7 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 4175 | 4041 | 84 | 50 |
| (1) CHEMISTS | 2465 | 2389 | 41 | 35 |
| (2) PHYSICISTS | 1536 | 1485 | 42 | 9 |
| (3) OTHER PHYSICAL SCIENTISTS | 174 | 167 | 1 | 6 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 636 | 613 | 14 | 9 |
| (1) EARTH SCIENTISTS | 571 | 554 | 10 | 7 |
| (2) ATMOSPHERIC SCIENTISTS | 23 | 21 | 0 | 2 |
| (3) OCEANOGRAPHERS | 42 | 38 | 4 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 3567 | 3442 | 34 | 71 |
| (1) MATHEMATICIANS | 3129 | 3093 | 13 | 23 |
| (2) COMPUTER SCIENTISTS | 438 | 349 | 21 | 48 |
| E. LIFE SCIENTISTS (TOTAL) | 4015 | 3878 | 84 | 53 |
| (1) AGRICULTURAL SCIENTISTS | 179 | 161 | 9 | 9 |
| (2) BIOLOGICAL SCIENTISTS | 3374 | 3272 | 72 | 30 |
| (3) MEDICAL SCIENTISTS | 462 | 445 | 3 | 14 |
| F. PSYCHOLOGISTS (TOTAL) | 2580 | 2419 | 22 | 139 |
| G. SOCIAL SCIENTISTS (TOTAL) | 9474 | 9295 | 77 | 102 |
| (1) ECONOMISTS | 1742 | 1715 | 13 | 14 |
| (2) SOCIOLOGISTS | 2166 | 2125 | 23 | 18 |
| (3) POLITICAL SCIENTISTS | 1656 | 1621 | 13 | 22 |
| (4) HISTORIANS | 3099 | 3054 | 18 | 27 |
| (5) OTHER SOCIAL SCIENTISTS | 811 | 780 | 10 | 21 |
| H. TOTAL (SUM OF A TO G) | 25784 | 24979 | 345 | 460 |
| I. FTE DISTRIBUTION | 25784 | 24834 | 469 | 481 |

ITEM 2 - FULL-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 19486 | 19064 | 204 | 218 |
| B. MD., DDS., DVM., ETC. | 269 | 262 | 2 | 5 |
| C. MASTER'S | 9078 | 8821 | 95 | 162 |
| D. BACHELOR'S OR EQUIVALENT | 951 | 832 | 44 | 75 |
| E. TOTAL (SUM A TO D) | 25784 | 24979 | 345 | 460 |

ITEM 3 - PART-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 219 | 212 | 1 | 6 |
| (1) AERO. & ASTRO. ENGRS. | 0 | 0 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 1 | 1 | 0 | 0 |
| (3) CIVIL ENGINEERS | 36 | 34 | 1 | 1 |
| (4) ELECTRICAL ENGINEERS | 46 | 46 | 0 | 0 |
| (5) MECHANICAL ENGINEERS | 49 | 49 | 0 | 0 |
| (6) OTHER ENGINEERS | 87 | 82 | 0 | 5 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 501 | 478 | 14 | 9 |
| (1) CHEMISTS | 314 | 301 | 7 | 6 |
| (2) PHYSICISTS | 160 | 151 | 7 | 2 |
| (3) OTHER PHYSICAL SCIENTISTS | 27 | 26 | 0 | 1 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 121 | 121 | 0 | 0 |
| (1) EARTH SCIENTISTS | 109 | 109 | 0 | 0 |
| (2) ATMOSPHERIC SCIENTISTS | 8 | 8 | 0 | 0 |
| (3) OCEANOGRAPHERS | 4 | 4 | 0 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 617 | 599 | 10 | 8 |
| (1) MATHEMATICIANS | 502 | 489 | 7 | 6 |
| (2) COMPUTER SCIENTISTS | 115 | 110 | 3 | 2 |
| E. LIFE SCIENTISTS (TOTAL) | 929 | 879 | 17 | 33 |
| (1) AGRICULTURAL SCIENTISTS | 6 | 6 | 0 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 451 | 422 | 16 | 13 |
| (3) MEDICAL SCIENTISTS | 472 | 451 | 1 | 20 |
| F. PSYCHOLOGISTS (TOTAL) | 738 | 709 | 5 | 24 |
| G. SOCIAL SCIENTISTS (TOTAL) | 2014 | 1978 | 10 | 26 |
| (1) ECONOMISTS | 493 | 491 | 1 | 1 |
| (2) SOCIOLOGISTS | 634 | 613 | 7 | 14 |
| (3) POLITICAL SCIENTISTS | 278 | 275 | 1 | 2 |
| (4) HISTORIANS | 389 | 380 | 0 | 9 |
| (5) OTHER SOCIAL SCIENTISTS | 260 | 259 | 1 | 0 |
| H. TOTAL (SUM OF A TO G) | 5139 | 4976 | 57 | 106 |
| I. FTE DISTRIBUTION | 1809 | 1793 | 23 | 33 |

ITEM 4 - PART-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 1482 | 1421 | 20 | 41 |
| B. MD., DDS., DVM., ETC. | 416 | 400 | 0 | 16 |
| C. MASTER'S | 2727 | 2685 | 8 | 34 |
| D. BACHELOR'S OR EQUIVALENT | 514 | 470 | 29 | 15 |
| E. TOTAL (SUM A TO D) | 5139 | 4976 | 57 | 106 |

Table B-56
Continued

ITEM 5 - S&E WITH DOCTORATE DEGREES, BY FIELD IN WHICH PRIMARILY EMPLOYED, 1975

| FIELD OF EMPLOYMENT | TOTAL | FULL - TIME | PART - TIME |
|---|---|---|---|
| A. ENGINEERS | 379 | 349 | 30 |
| B. PHYSICAL SCIENTISTS | 3355 | 3113 | 242 |
| C. ENVIRONMENTAL SCIENTISTS | 385 | 358 | 27 |
| D. MATHEMATICAL SCIENTISTS | 1808 | 1702 | 106 |
| E. LIFE SCIENTISTS | 2063 | 2887 | 176 |
| F. PSYCHOLOGISTS | 2213 | 1886 | 327 |
| G. SOCIAL SCIENTISTS | 3965 | 3391 | 574 |
| H. TOTAL (SUM OF A TO G) | 16968 | 15486 | 1482 |

ITEM 6 - FULL-TIME S&E, BY FIELD IN WHICH PRIMARILY EMPLOYED AND SEX, 1975

| FIELD OF EMPLOYMENT | TOTAL | MEN | WOMEN |
|---|---|---|---|
| A. ENGINEERS (TOTAL) | 1357 | 1348 | 9 |
| (1) ABRO. & ASTRO. ENGRS. | 63 | 60 | 3 |
| (2) CHEMICAL ENGINEERS | 38 | 38 | 0 |
| (3) CIVIL ENGINEERS | 183 | 182 | 1 |
| (4) ELECTRICAL ENGINEERS | 412 | 412 | 0 |
| (5) MECHANICAL ENGINEERS | 355 | 354 | 1 |
| (6) OTHER ENGINEERS | 306 | 302 | 4 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 4179 | 3712 | 463 |
| (1) CHEMISTS | 2465 | 2090 | 375 |
| (2) PHYSICISTS | 1936 | 1464 | 72 |
| (3) OTHER PHYSICAL SCIENTISTS | 174 | 158 | 16 |
| C. ENVIRONMENTAL SCIENTIST S(TOTAL) | 436 | 407 | 29 |
| (1) EARTH SCIENTISTS | 971 | 944 | 27 |
| (2) ATMOSPHERIC SCIENTISTS | 23 | 23 | 0 |
| (3) OCEANOGRAPHERS | 42 | 40 | 2 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 3947 | 3809 | 538 |
| (1) MATHEMATICIANS | 3129 | 2831 | 498 |
| (2) COMPUTER SCIENTISTS | 818 | 378 | 40 |
| E. LIFE SCIENTISTS (TOTAL) | 4015 | 3085 | 930 |
| (1) AGRICULTURAL SCIENTISTS | 179 | 169 | 10 |
| (2) BIOLOGICAL SCIENTISTS | 3374 | 2649 | 725 |
| (3) MEDICAL SCIENTISTS | 462 | 267 | 195 |
| F. PSYCHOLOGISTS (TOTAL) | 2580 | 2048 | 532 |
| G. SOCIAL SCIENTISTS (TOTAL) | 9674 | 7945 | 1329 |
| (1) ECONOMISTS | 1742 | 1593 | 149 |
| (2) SOCIOLOGISTS | 2166 | 1611 | 555 |
| (3) POLITICAL SCIENTISTS | 1636 | 1480 | 176 |
| (4) HISTORIANS | 3099 | 2640 | 459 |
| (5) OTHER SOCIAL SCIENTISTS | 811 | 621 | 190 |
| H. TOTAL (SUM OF A TO G) | 25784 | 21754 | 4030 |

ITEM 7 - GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS, BY FIELD AND FUNCTION IN WHICH PRIMARILY ENGAGED: AND TOTAL FTE FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) ABRO. & ASTRO. ENGRS. | 0 | 0 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 0 | 0 | 0 | 0 |
| (3) CIVIL ENGINEERS | 0 | 0 | 0 | 0 |
| (4) ELECTRICAL ENGINEERS | 0 | 0 | 0 | 0 |
| (5) MECHANICAL ENGINEERS | 0 | 0 | 0 | 0 |
| (6) OTHER ENGINEERS | 0 | 0 | 0 | 0 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) CHEMISTS | 0 | 0 | 0 | 0 |
| (2) PHYSICISTS | 0 | 0 | 0 | 0 |
| (3) OTHER PHYSICAL SCIENTISTS | 0 | 0 | 0 | 0 |
| C. ENVIRONMENTAL SCIENTIST S(TOTAL) | 0 | 0 | 0 | 0 |
| (1) EARTH SCIENTISTS | 0 | 0 | 0 | 0 |
| (2) ATMOSPHERIC SCIENTISTS | 0 | 0 | 0 | 0 |
| (3) OCEANOGRAPHERS | 0 | 0 | 0 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) MATHEMATICIANS | 0 | 0 | 0 | 0 |
| (2) COMPUTER SCIENTISTS | 0 | 0 | 0 | 0 |
| E. LIFE SCIENTISTS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) AGRICULTURAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (3) MEDICAL SCIENTISTS | 0 | 0 | 0 | 0 |
| F. PSYCHOLOGISTS (TOTAL) | 0 | 0 | 0 | 0 |
| G. SOCIAL SCIENTISTS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) ECONOMISTS | 0 | 0 | 0 | 0 |
| (2) SOCIOLOGISTS | 0 | 0 | 0 | 0 |
| (3) POLITICAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (4) HISTORIANS | 0 | 0 | 0 | 0 |
| (5) OTHER SOCIAL SCIENTISTS | 0 | 0 | 0 | 0 |
| H. TOTAL (SUM OF A TO G) | 0 | 0 | 0 | 0 |
| I. FTE DISTRIBUTION | 0 | 0 | 0 | 0 |

ITEM 8 - TECHNICIANS, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED, JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | R&D | OTHER ACTIVITIES |
|---|---|---|---|
| A. ENGINEERING TECHNICIANS | 240 | 6 | 234 |
| B. PHYSICAL SCIENCE TECHS | 264 | 44 | 220 |
| C. ENVIRONMENTAL SCIENCE TECHS | 31 | 4 | 27 |
| D. MATHEMATICS TECHNICIANS | 285 | 78 | 207 |
| E. BIO. & AGR. SCIENCE TECHS | 258 | 70 | 188 |
| F. MEDICAL & HEALTH-RELATED | 65 | 36 | 29 |
| G. PSYCHOLOGY TECHNICIANS | 48 | 7 | 33 |
| H. SOCIAL SCIENCE TECHS | 49 | 22 | 27 |
| I. TOTAL (SUM OF A TO H) | 1232 | 267 | 965 |



SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-57. SUMMARY DATA FOR TWO-YEAR INSTITUTIONS OF HIGHER EDUCATION: JANUARY 1975
(SUMMARIZED FROM NSF SURVEY FORM 724 REPRODUCED IN PART 2)

ITEM 1 - FULL-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 2824 | 2759 | 16 | 49 |
| (1) AERO. & ASTRO. ENGRS. | 54 | 54 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 74 | 74 | 0 | 0 |
| (3) CIVIL ENGINEERS | 556 | 544 | 4 | 8 |
| (4) ELECTRICAL ENGINEERS | 926 | 914 | 0 | 12 |
| (5) MECHANICAL ENGINEERS | 667 | 647 | 7 | 13 |
| (6) OTHER ENGINEERS | 547 | 526 | 5 | 16 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 3550 | 3511 | 5 | 34 |
| (1) CHEMISTS | 1973 | 1950 | 1 | 22 |
| (2) PHYSICISTS | 1294 | 1287 | 4 | 3 |
| (3) OTHER PHYSICAL SCIENTISTS | 283 | 274 | 0 | 9 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 605 | 603 | 1 | 1 |
| (1) EARTH SCIENTISTS | 521 | 519 | 1 | 1 |
| (2) ATMOSPHERIC SCIENTISTS | 29 | 29 | 0 | 0 |
| (3) OCEANOGRAPHERS | 55 | 55 | 0 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 4760 | 4657 | 25 | 78 |
| (1) MATHEMATICIANS | 4000 | 3955 | 11 | 34 |
| (2) COMPUTER SCIENTISTS | 760 | 702 | 14 | 44 |
| E. LIFE SCIENTISTS (TOTAL) | 5966 | 5882 | 3 | 81 |
| (1) AGRICULTURAL SCIENTISTS | 639 | 622 | 0 | 17 |
| (2) BIOLOGICAL SCIENTISTS | 3804 | 3780 | 2 | 22 |
| (3) MEDICAL SCIENTISTS | 1723 | 1680 | 1 | 42 |
| F. PSYCHOLOGISTS (TOTAL) | 2443 | 2135 | 9 | 299 |
| G. SOCIAL SCIENTISTS (TOTAL) | 6732 | 6585 | 31 | 116 |
| (1) ECONOMISTS | 925 | 907 | 7 | 11 |
| (2) SOCIOLOGISTS | 1488 | 1468 | 3 | 17 |
| (3) POLITICAL SCIENTISTS | 1046 | 1030 | 1 | 15 |
| (4) HISTORIANS | 2271 | 2253 | 0 | 18 |
| (5) OTHER SOCIAL SCIENTISTS | 1002 | 927 | 20 | 55 |
| H. TOTAL (SUM OF A TO G) | 26880 | 26132 | 90 | 658 |
| I. FTE DISTRIBUTION | 26880 | 26102 | 103 | 675 |

ITEM 2 - FULL-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 3374 | 3265 | 19 | 90 |
| B. MD., DDS., DVM., ETC. | 313 | 300 | 0 | 13 |
| C. MASTER'S | 20151 | 19649 | 43 | 459 |
| D. BACHELOR'S OR EQUIVALENT | 3042 | 2918 | 28 | 96 |
| E. TOTAL (SUM A TO D) | 26880 | 26132 | 90 | 658 |

ITEM 3 - PART-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED: AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 1931 | 1930 | 1 | 0 |
| (1) AERO. & ASTRO. ENGRS. | 28 | 28 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 39 | 39 | 0 | 0 |
| (3) CIVIL ENGINEERS | 312 | 312 | 0 | 0 |
| (4) ELECTRICAL ENGINEERS | 502 | 502 | 0 | 0 |
| (5) MECHANICAL ENGINEERS | 361 | 361 | 0 | 0 |
| (6) OTHER ENGINEERS | 289 | 288 | 1 | 0 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 1026 | 1026 | 0 | 0 |
| (1) CHEMISTS | 566 | 566 | 0 | 0 |
| (2) PHYSICISTS | 294 | 294 | 0 | 0 |
| (3) OTHER PHYSICAL SCIENTISTS | 166 | 166 | 0 | 0 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 195 | 195 | 0 | 0 |
| (1) EARTH SCIENTISTS | 174 | 174 | 0 | 0 |
| (2) ATMOSPHERIC SCIENTISTS | 11 | 11 | 0 | 0 |
| (3) OCEANOGRAPHERS | 10 | 10 | 0 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 2687 | 2684 | 1 | 2 |
| (1) MATHEMATICIANS | 2082 | 2081 | 0 | 1 |
| (2) COMPUTER SCIENTISTS | 525 | 523 | 1 | 1 |
| E. LIFE SCIENTISTS (TOTAL) | 1519 | 1515 | 0 | 4 |
| (1) AGRICULTURAL SCIENTISTS | 173 | 171 | 0 | 2 |
| (2) BIOLOGICAL SCIENTISTS | 905 | 903 | 0 | 2 |
| (3) MEDICAL SCIENTISTS | 441 | 441 | 0 | 0 |
| F. PSYCHOLOGISTS (TOTAL) | 1509 | 1485 | 1 | 23 |
| G. SOCIAL SCIENTISTS (TOTAL) | 3504 | 3500 | 2 | 2 |
| (1) ECONOMISTS | 507 | 506 | 1 | 0 |
| (2) SOCIOLOGISTS | 1086 | 1085 | 0 | 1 |
| (3) POLITICAL SCIENTISTS | 428 | 428 | 0 | 0 |
| (4) HISTORIANS | 776 | 776 | 0 | 0 |
| (5) OTHER SOCIAL SCIENTISTS | 707 | 705 | 1 | 1 |
| H. TOTAL (SUM OF A TO G) | 11891 | 11855 | 5 | 31 |
| I. FTE DISTRIBUTION | 3940 | 3922 | 4 | 14 |

ITEM 4 - PART-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 1250 | 1247 | 2 | 1 |
| B. MD., DDS., DVM., ETC. | 170 | 170 | 0 | 0 |
| C. MASTER'S | 8331 | 8302 | 2 | 27 |
| D. BACHELOR'S OR EQUIVALENT | 2440 | 2436 | 1 | 3 |
| E. TOTAL (SUM A TO D) | 11891 | 11855 | 5 | 31 |

Table B-57
Continued

ITEM 5 - S&E WITH DOCTORATE DEGREES, BY FIELD IN WHICH PRIMARILY EMPLOYED, 1975

| FIELD OF EMPLOYMENT | TOTAL | FULL - TIME | PART - TIME |
|---|---|---|---|
| A. ENGINEERS | 168 | 115 | 53 |
| B. PHYSICAL SCIENTISTS | 1016 | 782 | 234 |
| C. ENVIRONMENTAL SCIENTISTS | 77 | 62 | 15 |
| D. MATHEMATICAL SCIENTISTS | 392 | 263 | 129 |
| E. LIFE SCIENTISTS | 931 | 735 | 196 |
| F. PSYCHOLOGISTS | 733 | 447 | 286 |
| G. SOCIAL SCIENTISTS | 1387 | 970 | 337 |
| H. TOTAL (SUM OF A TO G) | 4624 | 3374 | 1250 |

ITEM 6 - FULL-TIME S&E, BY FIELD IN WHICH PRIMARILY EMPLOYED AND SEX, 1975

| FIELD OF EMPLOYMENT | TOTAL | MEN | WOMEN |
|---|---|---|---|
| A. ENGINEERS (TOTAL) | 2824 | 2794 | 30 |
| (1) AERO. & ASTRO. ENGRS. | 54 | 50 | 4 |
| (2) CHEMICAL ENGINEERS | 74 | 72 | 2 |
| (3) CIVIL ENGINEERS | 556 | 549 | 7 |
| (4) ELECTRICAL ENGINEERS | 926 | 922 | 4 |
| (5) MECHANICAL ENGINEERS | 667 | 663 | 4 |
| (6) OTHER ENGINEERS | 547 | 538 | 9 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 3590 | 3149 | 401 |
| (1) CHEMISTS | 1973 | 1668 | 305 |
| (2) PHYSICISTS | 1294 | 1223 | 71 |
| (3) OTHER PHYSICAL SCIENTISTS | 283 | 258 | 23 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 605 | 571 | 34 |
| (1) EARTH SCIENTISTS | 521 | 494 | 27 |
| (2) ATMOSPHERIC SCIENTISTS | 29 | 27 | 2 |
| (3) OCEANOGRAPHERS | 55 | 50 | 5 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 4760 | 3842 | 918 |
| (1) MATHEMATICIANS | 4000 | 3199 | 801 |
| (2) COMPUTER SCIENTISTS | 760 | 643 | 117 |
| E. LIFE SCIENTISTS (TOTAL) | 5966 | 3773 | 2193 |
| (1) AGRICULTURAL SCIENTISTS | 639 | 620 | 19 |
| (2) BIOLOGICAL SCIENTISTS | 3604 | 2741 | 863 |
| (3) MEDICAL SCIENTISTS | 1723 | 412 | 1311 |
| F. PSYCHOLOGISTS (TOTAL) | 2443 | 1687 | 756 |
| G. SOCIAL SCIENTISTS (TOTAL) | 6732 | 5436 | 1296 |
| (1) ECONOMISTS | 925 | 811 | 114 |
| (2) SOCIOLOGISTS | 1488 | 1054 | 434 |
| (3) POLITICAL SCIENTISTS | 1046 | 925 | 121 |
| (4) HISTORIANS | 2271 | 1879 | 392 |
| (5) OTHER SOCIAL SCIENTISTS | 1002 | 767 | 235 |
| H. TOTAL (SUM OF A TO G) | 26880 | 21252 | 5628 |

ITEM 7 - GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS, BY FIELD AND FUNCTION IN WHICH PRIMARILY ENGAGED AND TOTAL FTE FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) AERO. & ASTRO. ENGRS. | 0 | 0 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 0 | 0 | 0 | 0 |
| (3) CIVIL ENGINEERS | 0 | 0 | 0 | 0 |
| (4) ELECTRICAL ENGINEERS | 0 | 0 | 0 | 0 |
| (5) MECHANICAL ENGINEERS | 0 | 0 | 0 | 0 |
| (6) OTHER ENGINEERS | 0 | 0 | 0 | 0 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) CHEMISTS | 0 | 0 | 0 | 0 |
| (2) PHYSICISTS | 0 | 0 | 0 | 0 |
| (3) OTHER PHYSICAL SCIENTISTS | 0 | 0 | 0 | 0 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 0 | 0 | 0 | 0 |
| (1) EARTH SCIENTISTS | 0 | 0 | 0 | 0 |
| (2) ATMOSPHERIC SCIENTISTS | 0 | 0 | 0 | 0 |
| (3) OCEANOGRAPHERS | 0 | 0 | 0 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) MATHEMATICIANS | 0 | 0 | 0 | 0 |
| (2) COMPUTER SCIENTISTS | 0 | 0 | 0 | 0 |
| E. LIFE SCIENTISTS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) AGRICULTURAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (3) MEDICAL SCIENTISTS | 0 | 0 | 0 | 0 |
| F. PSYCHOLOGISTS (TOTAL) | 0 | 0 | 0 | 0 |
| G. SOCIAL SCIENTISTS (TOTAL) | 0 | 0 | 0 | 0 |
| (1) ECONOMISTS | 0 | 0 | 0 | 0 |
| (2) SOCIOLOGISTS | 0 | 0 | 0 | 0 |
| (3) POLITICAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (4) HISTORIANS | 0 | 0 | 0 | 0 |
| (5) OTHER SOCIAL SCIENTISTS | 0 | 0 | 0 | 0 |
| H. TOTAL (SUM OF A TO G) | 0 | 0 | 0 | 0 |
| I. FTE DISTRIBUTION | 0 | 0 | 0 | 0 |

ITEM 8 - TECHNICIANS, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED, JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | R&D | OTHER ACTIVITIES |
|---|---|---|---|
| A. ENGINEERING TECHNICIANS | 482 | 61 | 421 |
| B. PHYSICAL SCIENCE TECHS | 276 | 9 | 267 |
| C. ENVIRONMENTAL SCIENCE TECHS | 24 | 2 | 22 |
| D. MATHEMATICS TECHNICIANS | 535 | 34 | 501 |
| E. BIO. & AGR. SCIENCE TECHS | 375 | 28 | 347 |
| F. MEDICAL & HEALTH-RELATED | 250 | 0 | 250 |
| G. PSYCHOLOGY TECHNICIANS | 18 | 0 | 18 |
| H. SOCIAL SCIENCE TECHS | 22 | 0 | 22 |
| I. TOTAL (SUM OF A TO H) | 1982 | 134 | 1848 |

SOURCE: NATIONAL SCIENCE FOUNDATION

Table B-58. SUMMARY DATA FOR 21 FFRDC'S: JANUARY 1975
(SUMMARIZED FROM NSF SURVEY FORM 724 REPRODUCED IN PART 2)

ITEM 1 - FULL-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED; AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 5820 | 0 | 5763 | 57 |
| (1) AERO. & ASTRO. ENGRS. | 201 | 0 | 200 | 1 |
| (2) CHEMICAL ENGINEERS | 217 | 0 | 212 | 5 |
| (3) CIVIL ENGINEERS | 151 | 0 | 147 | 4 |
| (4) ELECTRICAL ENGINEERS | 2691 | 0 | 2675 | 16 |
| (5) MECHANICAL ENGINEERS | 1371 | 0 | 1359 | 12 |
| (6) OTHER ENGINEERS | 1189 | 0 | 1170 | 19 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 4472 | 0 | 4445 | 27 |
| (1) CHEMISTS | 1247 | 0 | 1238 | 9 |
| (2) PHYSICISTS | 2884 | 0 | 2880 | 4 |
| (3) OTHER PHYSICAL SCIENTISTS | 341 | 0 | 327 | 14 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 267 | 0 | 267 | 0 |
| (1) EARTH SCIENTISTS | 99 | 0 | 99 | 0 |
| (2) ATMOSPHERIC SCIENTISTS | 125 | 0 | 125 | 0 |
| (3) OCEANOGRAPHERS | 23 | 0 | 23 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 1213 | 0 | 1209 | 4 |
| (1) MATHEMATICIANS | 725 | 0 | 721 | 4 |
| (2) COMPUTER SCIENTISTS | 488 | 0 | 488 | 0 |
| E. LIFE SCIENTISTS (TOTAL) | 476 | 0 | 472 | 4 |
| (1) AGRICULTURAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 389 | 0 | 386 | 3 |
| (3) MEDICAL SCIENTISTS | 87 | 0 | 86 | 1 |
| F. PSYCHOLOGISTS (TOTAL) | 9 | 0 | 8 | 1 |
| G. SOCIAL SCIENTISTS (TOTAL) | 133 | 0 | 130 | 3 |
| (1) ECONOMISTS | 35 | 0 | 34 | 1 |
| (2) SOCIOLOGISTS | 2 | 0 | 1 | 1 |
| (3) POLITICAL SCIENTISTS | 9 | 0 | 8 | 1 |
| (4) HISTORIANS | 3 | 0 | 3 | 0 |
| (5) OTHER SOCIAL SCIENTISTS | 84 | 0 | 84 | 0 |
| H. TOTAL (SUM OF A TO G) | 12370 | 0 | 12274 | 96 |
| I. FTE DISTRIBUTION | 12370 | 9 | 12265 | 96 |

ITEM 2 - FULL-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 4614 | 0 | 4593 | 21 |
| B. MD., DDS., DVM., ETC. | 39 | 0 | 38 | 1 |
| C. MASTER'S | 2987 | 0 | 2969 | 18 |
| D. BACHELOR'S OR EQUIVALENT | 4730 | 0 | 4674 | 56 |
| E. TOTAL (SUM A TO D) | 12370 | 0 | 12274 | 96 |

ITEM 3 - PART-TIME S&E, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED; AND FTE, BY FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 22 | 0 | 22 | 0 |
| (1) AERO. & ASTRO. ENGRS. | 0 | 0 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 3 | 0 | 3 | 0 |
| (3) CIVIL ENGINEERS | 1 | 0 | 1 | 0 |
| (4) ELECTRICAL ENGINEERS | 11 | 0 | 11 | 0 |
| (5) MECHANICAL ENGINEERS | 5 | 0 | 5 | 0 |
| (6) OTHER ENGINEERS | 2 | 0 | 2 | 0 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 88 | 1 | 87 | 0 |
| (1) CHEMISTS | 29 | 0 | 29 | 0 |
| (2) PHYSICISTS | 50 | 0 | 50 | 0 |
| (3) OTHER PHYSICAL SCIENTISTS | 9 | 1 | 8 | 0 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 9 | 0 | 9 | 0 |
| (1) EARTH SCIENTISTS | 3 | 0 | 3 | 0 |
| (2) ATMOSPHERIC SCIENTISTS | 6 | 0 | 6 | 0 |
| (3) OCEANOGRAPHERS | 0 | 0 | 0 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 27 | 0 | 27 | 0 |
| (1) MATHEMATICIANS | 15 | 0 | 15 | 0 |
| (2) COMPUTER SCIENTISTS | 12 | 0 | 12 | 0 |
| E. LIFE SCIENTISTS (TOTAL) | 24 | 0 | 24 | 0 |
| (1) AGRICULTURAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 20 | 0 | 20 | 0 |
| (3) MEDICAL SCIENTISTS | 4 | 0 | 4 | 0 |
| F. PSYCHOLOGISTS (TOTAL) | 1 | 0 | 0 | 1 |
| G. SOCIAL SCIENTISTS (TOTAL) | 5 | 0 | 5 | 0 |
| (1) ECONOMISTS | 4 | 0 | 4 | 0 |
| (2) SOCIOLOGISTS | 0 | 0 | 0 | 0 |
| (3) POLITICAL SCIENTISTS | 1 | 0 | 1 | 0 |
| (4) HISTORIANS | 0 | 0 | 0 | 0 |
| (5) OTHER SOCIAL SCIENTISTS | 0 | 0 | 0 | 0 |
| H. TOTAL (SUM OF A TO G) | 176 | 1 | 174 | 1 |
| I. FTE DISTRIBUTION | 101 | 1 | 100 | 0 |

ITEM 4 - PART-TIME S&E, BY HIGHEST DEGREE EARNED AND FUNCTION IN WHICH PRIMARILY EMPLOYED, 1975

| HIGHEST EARNED DEGREE | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. PH.D. OR SC.D. | 69 | 1 | 68 | 0 |
| B. MD., DDS., DVM., ETC. | 4 | 0 | 4 | 0 |
| C. MASTER'S | 50 | 0 | 49 | 1 |
| D. BACHELOR'S OR EQUIVALENT | 53 | 0 | 53 | 0 |
| E. TOTAL (SUM A TO D) | 176 | 1 | 174 | 1 |

Table B-58
Continued

ITEM 5 - S&E WITH DOCTORATE DEGREES, BY FIELD IN WHICH PRIMARILY EMPLOYED, 1975

| FIELD OF EMPLOYMENT | TOTAL | FULL - TIME | PART - TIME |
|---|---|---|---|
| A. ENGINEERS | 1055 | 1051 | 4 |
| B. PHYSICAL SCIENTISTS | 2966 | 2922 | 44 |
| C. ENVIRONMENTAL SCIENTISTS | 173 | 167 | 6 |
| D. MATHEMATICAL SCIENTISTS | 200 | 195 | 5 |
| E. LIFE SCIENTISTS | 260 | 250 | 10 |
| F. PSYCHOLOGISTS | 7 | 7 | 0 |
| G. SOCIAL SCIENTISTS | 22 | 22 | 0 |
| H. TOTAL (SUM OF A TO G) | 4683 | 4614 | 69 |

ITEM 6 - FULL-TIME S&E, BY FIELD IN WHICH PRIMARILY EMPLOYED AND SEX, 1975

| FIELD OF EMPLOYMENT | TOTAL | MEN | WOMEN |
|---|---|---|---|
| A. ENGINEERS (TOTAL) | 5820 | 5776 | 44 |
| (1) AERO. & ASTRO. ENGRS. | 201 | 200 | 1 |
| (2) CHEMICAL ENGINEERS | 217 | 211 | 6 |
| (3) CIVIL ENGINEERS | 151 | 149 | 2 |
| (4) ELECTRICAL ENGINEERS | 2691 | 2680 | 11 |
| (5) MECHANICAL ENGINEERS | 1371 | 1360 | 11 |
| (6) OTHER ENGINEERS | 1189 | 1176 | 13 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 4472 | 4282 | 190 |
| (1) CHEMISTS | 1247 | 1156 | 91 |
| (2) PHYSICISTS | 2884 | 2804 | 80 |
| (3) OTHER PHYSICAL SCIENTISTS | 341 | 322 | 19 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 247 | 236 | 11 |
| (1) EARTH SCIENTISTS | 99 | 96 | 3 |
| (2) ATMOSPHERIC SCIENTISTS | 125 | 118 | 7 |
| (3) OCEANOGRAPHERS | 23 | 22 | 1 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 1213 | 996 | 217 |
| (1) MATHEMATICIANS | 725 | 637 | 88 |
| (2) COMPUTER SCIENTISTS | 488 | 359 | 129 |
| E. LIFE SCIENTISTS (TOTAL) | 476 | 360 | 116 |
| (1) AGRICULTURAL SCIENTISTS | 0 | 0 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 389 | 285 | 104 |
| (3) MEDICAL SCIENTISTS | 87 | 75 | 12 |
| F. PSYCHOLOGISTS (TOTAL) | 9 | 8 | 1 |
| G. SOCIAL SCIENTISTS (TOTAL) | 133 | 123 | 10 |
| (1) ECONOMISTS | 35 | 32 | 3 |
| (2) SOCIOLOGISTS | 2 | 1 | 1 |
| (3) POLITICAL SCIENTISTS | 9 | 8 | 1 |
| (4) HISTORIANS | 3 | 3 | 0 |
| (5) OTHER SOCIAL SCIENTISTS | 84 | 79 | 5 |
| H. TOTAL (SUM OF A TO G) | 12370 | 11781 | 589 |

ITEM 7 - GRADUATE STUDENTS RECEIVING COMPENSATION FOR PART-TIME SERVICES AS SCIENTISTS AND ENGINEERS, BY FIELD AND FUNCTION IN WHICH PRIMARILY ENGAGED; AND TOTAL FTE FUNCTION, 1975

| FIELD OF EMPLOYMENT | TOTAL | TEACHING | R&D | OTHER S&E ACTIVITIES |
|---|---|---|---|---|
| A. ENGINEERS (TOTAL) | 77 | 0 | 76 | 1 |
| (1) AERO. & ASTRO. ENGRS. | 0 | 0 | 0 | 0 |
| (2) CHEMICAL ENGINEERS | 14 | 0 | 14 | 0 |
| (3) CIVIL ENGINEERS | 1 | 0 | 0 | 1 |
| (4) ELECTRICAL ENGINEERS | 10 | 0 | 10 | 0 |
| (5) MECHANICAL ENGINEERS | 7 | 0 | 7 | 0 |
| (6) OTHER ENGINEERS | 45 | 0 | 45 | 0 |
| B. PHYSICAL SCIENTISTS (TOTAL) | 465 | 0 | 465 | 0 |
| (1) CHEMISTS | 162 | 0 | 162 | 0 |
| (2) PHYSICISTS | 178 | 0 | 178 | 0 |
| (3) OTHER PHYSICAL SCIENTISTS | 125 | 0 | 127 | 0 |
| C. ENVIRONMENTAL SCIENTISTS(TOTAL) | 57 | 0 | 57 | 0 |
| (1) EARTH SCIENTISTS | 9 | 0 | 9 | 0 |
| (2) ATMOSPHERIC SCIENTISTS | 35 | 0 | 35 | 0 |
| (3) OCEANOGRAPHERS | 13 | 0 | 13 | 0 |
| D. MATHEMATICAL SCIENTISTS (TOTAL) | 45 | 0 | 45 | 0 |
| (1) MATHEMATICIANS | 20 | 0 | 20 | 0 |
| (2) COMPUTER SCIENTISTS | 25 | 0 | 25 | 0 |
| E. LIFE SCIENTISTS (TOTAL) | 40 | 0 | 40 | 0 |
| (1) AGRICULTURAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (2) BIOLOGICAL SCIENTISTS | 39 | 0 | 39 | 0 |
| (3) MEDICAL SCIENTISTS | 1 | 0 | 1 | 0 |
| F. PSYCHOLOGISTS (TOTAL) | 2 | 0 | 2 | 0 |
| G. SOCIAL SCIENTISTS (TOTAL) | 12 | 0 | 12 | 0 |
| (1) ECONOMISTS | 1 | 0 | 1 | 0 |
| (2) SOCIOLOGISTS | 1 | 0 | 1 | 0 |
| (3) POLITICAL SCIENTISTS | 0 | 0 | 0 | 0 |
| (4) HISTORIANS | 2 | 0 | 2 | 0 |
| (5) OTHER SOCIAL SCIENTISTS | 8 | 0 | 8 | 0 |
| H. TOTAL (SUM OF A TO G) | 698 | 0 | 697 | 1 |
| I. FTE DISTRIBUTION | 390 | 0 | 389 | 1 |

ITEM 8 - TECHNICIANS, BY FIELD AND FUNCTION IN WHICH PRIMARILY EMPLOYED, JANUARY 1975

| FIELD OF EMPLOYMENT | TOTAL | R&D | OTHER ACTIVITIES |
|---|---|---|---|
| A. ENGINEERING TECHNICIANS | 5079 | 5033 | 46 |
| B. PHYSICAL SCIENCE TECHS | 909 | 900 | 9 |
| C. ENVIRONMENTAL SCIENCE TECHS | 77 | 77 | 0 |
| D. MATHEMATICS TECHNICIANS | 623 | 623 | 0 |
| E. BIO. & AGR. SCIENCE TECHS | 106 | 106 | 0 |
| F. MEDICAL & HEALTH-RELATED | 316 | 316 | 0 |
| G. PSYCHOLOGY TECHNICIANS | 0 | 0 | 0 |
| H. SOCIAL SCIENCE TECHS | 19 | 19 | 0 |
| I. TOTAL (SUM OF A TO H) | 7129 | 7074 | 55 |

SOURCE: NATIONAL SCIENCE FOUNDATION

# Part 2

# Reproductions


Reproduction of Survey Questionnaire ..... 50
Reproduction of Survey Instructions and Definitions ..... 53


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NSF FORM 724

OMB No. 99-82002
Approval expires December 31, 1975

NATIONAL SCIENCE FOUNDATION
Washington D.C. 20550

## SURVEY OF SCIENTIFIC ACTIVITIES OF INSTITUTIONS OF HIGHER EDUCATION

### Employment of Professional and Technical Personnel in the Sciences and Engineering, January 1975

Organizations are requested to complete and return this form to:

**NATIONAL SCIENCE FOUNDATION**
**1800 G Street, N.W.**
**Washington, D.C. 20550 Attn: UNISG**

Name and address of institution:
(Please correct if name or address has changed)

This survey requests employment data as of January 1975. The completed 1975 questionnaire should be returned to NSF by March 31, 1975. Your cooperation in returning the survey questionnaire promptly is appreciated.

Please read the enclosed instructions before completing this form. If you have any questions about the completion of this form, contact Robert Loycano (202-282-7790). Where exact data are not available, use estimates. Please complete all items; estimates by college officials will be better than NSF estimates. Enter "0" as an item total (lines 2100; 2200, etc., are item totals) rather than leave the total blank.

**All entries should be in whole numbers. Do not enter decimals or fractions.**

**Institutions of Higher Education**

Include data for branches (including regional campuses) and all organizational units of your institution, such as a medical school or agricultural experiment station. Also include any hospital or clinic owned, operated, or controlled by the university, and integrated operationally with the clinical programs of your medical school. Exclude data for any Federally Funded Research and Development Centers (FFRDC's) administered by your institution. (See below.)

Please classify your institution according to (1) highest degree granted in the sciences or engineering and (2) primary administrative control.

| Highest degree granted in the sciences or engineering during 1973-74 | Check one | One field in which highest degree was awarded | Check primary administrative control of your institution | |
|---|---|---|---|---|
| Ph.D. | ☐ | _____ | Federal | ☐ |
| M.D., D.D.S., etc. | ☐ | _____ | State | ☐ |
| Master's | ☐ | _____ | Local | ☐ |
| Bachelor's or equivalent | ☐ | _____ | Private | ☐ |
| Degree other than in science or engineering | ☐ | _____ | | |
| 2-year program | ☐ | _____ | | |

**Federally Funded Research and Development Centres (FFRDC's)**

Separate forms have been mailed directly to all FFRDC's administered by academic institutions. A list of these Centers appears on page 2 of the Instructions and Definitions.



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## SECTION A. NUMBER OF SCIENTISTS AND ENGINEERS, JANUARY 1975

(Include postdoctorals; exclude graduate students)

**Item 1.** Full-time scientists and engineers, by field and function in which primarily employed (enter the totals of 1a - 1g in 1h); and total full-time equivalents (FTE), by function, January 1975 (enter in 1i)

| FIELD OF EMPLOYMENT | | TOTAL (1) | TEACHING (2) | R&D (3) | Other activities (4) |
|---|---|---|---|---|---|
| a. Engineers (total) | 2110 | | | | |
| (1) Aeronautical & astronautical engineers | 2111 | | | | |
| (2) Chemical engineers | 2112 | | | | |
| (3) Civil engineers | 2113 | | | | |
| (4) Electrical engineers | 2114 | | | | |
| (5) Mechanical engineers | 2115 | | | | |
| (6) Other engineers | 2116 | | | | |
| b. Physical scientists (total) | 2120 | | | | |
| (1) Chemists | 2121 | | | | |
| (2) Physicists | 2122 | | | | |
| (3) Other physical scientists | 2123 | | | | |
| c. Environmental scientists (total) | 2130 | | | | |
| (1) Earth scientists | 2131 | | | | |
| (2) Atmospheric scientists | 2132 | | | | |
| (3) Oceanographers | 2133 | | | | |
| d. Mathematical scientists (total) | 2140 | | | | |
| (1) Mathematicians (exclude computer scientists) | 2141 | | | | |
| (2) Computer scientists (exclude programmers) | 2142 | | | | |
| e. Life scientists (total) | 2150 | | | | |
| (1) Agricultural scientists | 2151 | | | | |
| (2) Biological scientists | 2152 | | | | |
| (3) Medical scientists (see instructions, p.1) | 2153 | | | | |
| f. Psychologists (total) | 2160 | | | | |
| g. Social scientists (total) | 2170 | | | | |
| (1) Economists | 2171 | | | | |
| (2) Sociologists | 2172 | | | | |
| (3) Political scientists | 2173 | | | | |
| (4) Historians | 2174 | | | | |
| (5) Other social scientists | 2175 | | | | |
| h. Total headcount (sum of a to g) 1/ | 2100 | | | | |
| i. FTE distribution, by function 2/ | 2150 | | | | |

**Item 2.** Full-time scientists and engineers, by highest earned degree and function in which primarily employed, January 1975

| HIGHEST EARNED DEGREE | | TOTAL (1) | TEACHING (2) | R&D (3) | Other activities (4) |
|---|---|---|---|---|---|
| a. Ph.D. or Sc.D. (excl. Ed.D., J.D., etc.) 3/ | 2210 | | | | |
| b. M.D., D.D.S., D.V.M., etc. | 2220 | | | | |
| c. Master's 3/ | 2300 | | | | |
| d. Bachelor's or the equivalent | 2240 | | | | |
| e. Total (sum of a to d) 1/ | 2200 | | | | |

1/ Totals in line 1h should be the same as the corresponding totals in line 2e.

2/ The total reported in item 1i, column 1, should, by definition, be the same as the total in item 1h, column 1. However, the FTE distribution by function (columns 2, 3, and 4) will not necessarily coincide with the functional distribution on a "primarily employed" basis in line 1h.

3/ Include in line 2c Ed.D's, J.D.'s, etc. if they are employed in the sciences or engineering.



**Item 3.** Part-time scientists and engineers, by field and function in which primarily employed (enter the totals of 3a - 3g in 3h); and total FTE's by function, January 1975 (enter in 3i) (exclude graduate students).

| FIELD OF EMPLOYMENT | | TOTAL (1) | TEACHING (2) | R&D (3) | Other activities (4) |
|---|---|---|---|---|---|
| a. Engineers (total) | 2310 | | | | |
| (1) Aeronautical & astronautical engineers | 2311 | | | | |
| (2) Chemical engineers | 2312 | | | | |
| (3) Civil engineers | 2313 | | | | |
| (4) Electrical engineers | 2314 | | | | |
| (5) Mechanical engineers | 2315 | | | | |
| (6) Other engineers | 2316 | | | | |
| b. Physical scientists (total) | 2320 | | | | |
| (1) Chemists | 2321 | | | | |
| (2) Physicists | 2322 | | | | |
| (3) Other physical scientists | 2323 | | | | |
| c. Environmental scientists (total) | 2330 | | | | |
| (1) Earth scientists | 2331 | | | | |
| (2) Atmospheric scientists | 2332 | | | | |
| (3) Oceanographers | 2333 | | | | |
| d. Mathematical scientists (total) | 2340 | | | | |
| (1) Mathematicians (exclude computer scientists) | 2341 | | | | |
| (2) Computer scientists (exclude programmers) | 2342 | | | | |
| e. Life scientists (total) | 2350 | | | | |
| (1) Agricultural scientists | 2351 | | | | |
| (2) Biological scientists | 2352 | | | | |
| (3) Medical scientists (see instructions, p.1.) | 2353 | | | | |
| f. Psychologists (total) | 2360 | | | | |
| g. Social scientists (total) | 2370 | | | | |
| (1) Economists | 2371 | | | | |
| (2) Sociologists | 2372 | | | | |
| (3) Political scientists | 2373 | | | | |
| (4) Historians | 2374 | | | | |
| (5) Other social scientists | 2375 | | | | |
| h. Total headcount (sum of a to g) 1/ | 2300 | | | | |
| i. FTE distribution, by function 2/ | 2390 | | | | |

**Item 4.** Part-time scientists and engineers, by highest earned degree and function in which primarily employed, January 1975

| HIGHEST EARNED DEGREE | | TOTAL (1) | TEACHING (2) | R&D (3) | Other activities (4) |
|---|---|---|---|---|---|
| a. Ph.D. or Sc.D. (excl. Ed.D., J.D., etc.) 3/ | 2410 | | | | |
| b. M.D., D.D.S., D.V.M., etc. | 2420 | | | | |
| c. Master's 3/ | 2430 | | | | |
| d. Bachelor's or the equivalent | 2440 | | | | |
| e. Total (sum of a to d) 1/ | 2400 | | | | |

1/ Totals in line 3h should be the same as the corresponding totals in line 4e.

2/ The totals in item 3i converting figures on part-time employment into FTE's will necessarily differ from headcount totals in line 3h.

3/ Include in line 4c Ed.D's, J.D.'s etc. if they are employed in the sciences or engineering.

**Item 6.** Scientists and engineers with doctorate degrees, by field in which primarily employed, January 1975 (include only Ph.D's and Sc.D's reported in items 2n and 4n. Exclude M.D., D.D.S. degrees, etc.)

| FIELD OF EMPLOYMENT | | TOTAL (1) | FULL TIME (2) | PART TIME (3) |
|---|---|---|---|---|
| a. Engineers | 2510 | | | |
| b. Physical scientists | 2520 | | | |
| c. Environmental scientists | 2530 | | | |
| d. Mathematical scientists | 2540 | | | |
| e. Life scientists | 2550 | | | |
| f. Psychologists | 2560 | | | |
| g. Social scientists | 2570 | | | |
| h. Total (sum of a to g) A/ | 2500 | | | |

A/ 3h, column 2 must equal 2a, column 1; 5h, column 1 must equal 4a, column 1

**Item 8.** Full-time scientists and engineers, by field in which primarily employed, and sex, January 1975. (Totals reported in item 8, column 1, should equal the totals reported in item 1, column 1.)

| FIELD OF EMPLOYMENT | | TOTAL (1) | MEN (2) | WOMEN (3) |
|---|---|---|---|---|
| a. Engineers (total) | 2610 | | | |
| (1) Aeronautical & astronautical | 2611 | | | |
| (2) Chemical engineers | 2612 | | | |
| (3) Civil engineers | 2613 | | | |
| (4) Electrical engineers | 2614 | | | |
| (5) Mechanical engineers | 2615 | | | |
| (6) Other engineers | 26 | | | |
| b. Physical scientists (total) | 26 20 | | | |
| (1) Chemists | 2621 | | | |
| (2) Physicists | 2622 | | | |
| (3) Other physical scientists | 2623 | | | |
| c. Environmental scientists (total) | 26 30 | | | |
| (1) Earth scientists | 2631 | | | |
| (2) Atmospheric scientists | 2632 | | | |
| (3) Oceanographers | 2633 | | | |
| d. Mathematical scientists (total) | 2640 | | | |
| (1) Mathematicians (exclude computer scientists) | 2641 | | | |
| (2) Computer scientists (exclude programmers) | 2642 | | | |
| e. Life scientists (total) | 26 50 | | | |
| (1) Agricultural scientists | 2651 | | | |
| (2) Biological scientists | 2652 | | | |
| (3) Medical scientists (see instructions, p 1) | 2653 | | | |
| f. Psychologists (total) | 2660 | | | |
| g. Social scientists (total) | 26 70 | | | |
| (1) Economists | 2671 | | | |
| (2) Sociologists | 2672 | | | |
| (3) Political scientists | 2673 | | | |
| (4) Historians | 2674 | | | |
| (5) Other social scientists | 2675 | | | |
| h. Total headcount (sum of a to g) | 2600 | | | |



## SECTION B. NUMBER OF GRADUATE STUDENTS ENGAGED PART TIME AS SCIENTISTS AND ENGINEERS, January 1975. (Do not report postdoctorals here; include them in section A.)

**Item 7.** Graduate students receiving compensation for part-time services as scientists and engineers at your institution, by field and function in which primarily engaged (enter the totals of 7a - 7g in 7h); and total FTE's, by function (enter in 7i), January 1975

| FIELD OF EMPLOYMENT | | TOTAL (1) | TEACHING (2) | R&D (3) | Other activities (4) |
|---|---|---|---|---|---|
| a. Engineers (total) | 2710 | | | | |
| (1) Aeronautical & astronautical engineers | 2711 | | | | |
| (2) Chemical engineers | 2712 | | | | |
| (3) Civil engineers | 2713 | | | | |
| (4) Electrical engineers | 2714 | | | | |
| (5) Mechanical engineers | 2715 | | | | |
| (6) Other engineers | 2716 | | | | |
| b. Physical scientists (total) | 2720 | | | | |
| (1) Chemists | 2721 | | | | |
| (2) Physicists | 2722 | | | | |
| (3) Other physical scientists | 2723 | | | | |
| c. Environmental scientists (total) | 2730 | | | | |
| (1) Earth scientists | 2731 | | | | |
| (2) Atmospheric scientists | 2732 | | | | |
| (3) Oceanographers | 2733 | | | | |
| d. Mathematical scientists (total) | 2740 | | | | |
| (1) Mathematicians (exclude computer scientists) | 2741 | | | | |
| (2) Computer scientists | 2742 | | | | |
| e. Life scientists (total) | 2750 | | | | |
| (1) Agricultural scientists | 2751 | | | | |
| (2) Biological scientists | 2752 | | | | |
| (3) Medical scientists | 2753 | | | | |
| f. Psychologists (total) | 2760 | | | | |
| g. Social scientists (total) | 2770 | | | | |
| (1) Economists | 2771 | | | | |
| (2) Sociologists | 2772 | | | | |
| (3) Political scientists | 2773 | | | | |
| (4) Historians | 2774 | | | | |
| (5) Other social scientists | 2775 | | | | |
| h. Total headcount (sum of a to g) | 2700 | | | | |
| i. FTE distribution, by function A/ | 2799 | | | | |

A/ The totals in item 7i converting figures on part-time services into FTE's will necessarily differ from headcount totals in item 7h

NSF Form 734 (12-74)
Instruction sheet

## SECTION C. NUMBER OF TECHNICIANS EMPLOYED IN THE SCIENCES AND ENGINEERING, January 1975

Item 8. Technicians, by field and function in which primarily employed, January 1975

| FIELD OF EMPLOYMENT | | TOTAL (1) | R&D (2) | Other activities (3) |
|---|---|---|---|---|
| a. Engineering technicians | 2810 | | | |
| b. Physical science technicians | 2820 | | | |
| c. Environmental science technicians | 2830 | | | |
| d. Mathematics technicians (incl. computer programmers) | 2840 | | | |
| e. Biological and agricultural science technicians | 2850 | | | |
| f. Medical and health-related technicians | 2860 | | | |
| g. Psychology technicians | 2870 | | | |
| h. Social science technicians | 2880 | | | |
| i. Total (sum of a to h) | 2800 | | | |

### CHECK LIST

1. Are all entries rounded to whole numbers? (Do not enter fractions or decimals.)
2. Do the data add to subtotals?
3. Are all items completed? YOUR ESTIMATES will be better than nary. Estimates may be noted on a separate sheet.
4. Are all branches and components such as a medical school and agricultural experiment station included?
5. Have you included all postdoctorals?

### 1974–1975 DATA CHECK

Please compare your January 1975 personnel data with your response for January 1974 particularly for the following item totals. Please explain below or on a separate sheet any significant changes and where possible, indicate any required adjustments in data reported in previous surveys.

| | 1974 | 1975 |
|---|---|---|
| Total full-time scientists & engineers | Line 2100, col. 1 | Line 2100, col. 1 |
| Total part-time scientists & engineers | Line 2300, col. 1 | Line 2300, col. 1 |
| Total graduate students engaged part-time as scientists & engineers | Line 2700, col. 1 | Line 2700, col. 1 |
| Total technicians employed in the sciences and engineering | Line 2800, col. 1 | Line 2800, col. 1 |

### REMARKS

### CONFIDENTIALITY

Please indicate the number of any item that should not be published with your institution identified.

ITEM

PLEASE TYPE OR PRINT

| NAME OF PERSON SUBMITTING THIS FORM | TITLE | AREA CODE | EXCH | NO. | EXT |
|---|---|---|---|---|---|
| | | | | | |
| NAME OF PERSON WHO PREPARED THIS SUBMISSION (If different from above) | TITLE | AREA CODE | EXCH | NO. | EXT |
| | | | | | |

| NAME OF INSTITUTION | DATE | ADDRESS (number, street, city, State, ZIP code) |
|---|---|---|
| | | |



NATIONAL SCIENCE FOUNDATION
WASHINGTON, D. C. 20550

# SURVEY OF SCIENTIFIC ACTIVITIES OF INSTITUTIONS OF HIGHER EDUCATION

## Employment of Professional and Technical Personnel in the Sciences and Engineering, January 1975

## INSTRUCTIONS AND DEFINITIONS

The National Science Foundation requests your cooperation in completing the attached questionnaire covering the personnel characteristics of your institution as they relate to the sciences and engineering. This form requests employment data as of January 1975. The questionnaire should be completed and returned to NSF by **March 31, 1975**.

This survey is comparable to that conducted by this office for last year, which included manpower as of January 1974. Where data reported in the current survey differ significantly from those reported in the previous survey, please indicate the reasons for the difference, such as "opening of new medical school," etc., at the end of the questionnaire or on a separate sheet of paper.

If you have any questions regarding information requested on this form, write or telephone Mr. Robert Loycano at the Universities and Nonprofit Institutions Studies Group, Division of Science Resources Studies, National Science Foundation, 1800 G Street, N. W., Washington, D. C. 20550 (Telephone: 202-282-7790). Additional forms, as well as copies of previous responses, may be obtained by writing to the above address.

### Institutions of Higher Education

Academic institutions should include in the form for the parent institution data on professional and technical personnel employed in the sciences and engineering in all branches and other units of the parent institution, *including* regional campuses, medical school, or an agricultural experiment station, but *excluding* an associated Federally Funded Research and Development Center (FFRDC). FFRDC's are to report their data separately from the administering university.

*Include* all personnel who were paid a salary or stipend, including postdoctorals, and other staff, such as members of religious orders, who received no remuneration while employed at the institution.

*Exclude*: (1) personnel on sabbatical or other leave status; (2) personnel employed in branches of your institution located in foreign countries; (3) voluntary workers; (4) student health service personnel.

### Medical Schools

*Incorporate* data for medical schools in the data for the parent institution. Medical schools are those two- or four-year schools of medicine approved by the Council on Medical Education

**All entries should be in whole numbers; do not enter decimals or fractions. Detail should add to totals.**

and Hospitals and the Association of American Medical Colleges, including (1) teaching and R&D functions of hospitals or clinics owned, operated, or controlled by universities and integrated operationally with the clinical programs of their medical schools; (2) research bureaus or institutes which are integral parts of medical schools; (3) research bureaus and institutes which are nonuniversity owned but are affiliated with the medical school and any university bureaus and institutes which may be outside the departmental structure of universities but whose senior research staff members hold teaching appointments with medical schools.

Personnel employed at such organizations that are to be reported in the survey include: physicians (residents and nonresidents), dentists, public health specialists, pharmacists, etc., who spend the greatest proportion of their time in teaching, clinical investigation, or other R&D activities.

Exclude: (1) all medical practitioners who spend the greatest proportion of their time providing patient care, dispensing drugs or services, or in diagnosis, etc.; (2) scientists whose primary employment is at independent hospitals even though they may perform some teaching or research functions for your institution through cooperative agreements; (3) interns; (4) nurses; (5) unpaid voluntary staff at medical or dental schools.

### Federally Funded Research and Development Centers

For purposes of this survey, FFRDC's are defined as: R&D organizations exclusively or substantially financed by the Government, and administered on a contractual basis by educational institutions or other organizations. The following is a current list of FFRDC's administered by universities and colleges:

Ames Laboratory
Applied Physics Laboratory
Argonne National Laboratory
Brookhaven National Laboratory
Center for Naval Analyses
Cerro Tololo Inter-American Observatory
E. O. Lawrence Berkeley Laboratory
E. O. Lawrence Livermore Laboratory
Jet Propulsion Laboratory
Kitt Peak National Observatory
Lincoln Laboratory
Los Alamos Scientific Laboratory
Fermi National Accelerator Laboratory
National Astronomy and Ionosphere Center
National Center for Atmospheric Research
National Radio Astronomy Observatory
Oak Ridge Associated Universities
Ordnance Research Laboratory
Plasma Physics Laboratory
Space Radiation Effects Laboratory
Stanford Linear Accelerator Center

### Data Elements Required to Complete This Survey

If the following seven characteristics are known for each science and engineering employee, the request can be completed without estimates. The characteristics are further described elsewhere in the instructions.

1. Scope of personnel included:
   a. Scientists and engineers
   b. Science and engineering graduate students
   c. Science and engineering technicians
2. Assignment status:
   a. Full time
   b. Part time
3. Field of employment (23 fields in 7 groupings)
4. Full-time equivalent (FTE)
5. Function:
   a. Teaching
   b. Research and development
   c. Other science and engineering activities
6. Highest earned degree:
   a. Ph.D. or Sc.D.
   b. M.D., D.D.S., D.V.M., etc.
   c. Master's
   d. Bachelor's or its equivalent
7. Classification of scientists and engineers by sex.

### Classification of Fields of Employment in the Sciences and Engineering

Listed below are the broad and detailed fields of employment corresponding to the fields shown on the questionnaire with illustrative disciplines in each field.

Please classify persons (including those employed in interdisciplinary or multidisciplinary specializations) in the listed fields with which their activities (teaching, research, or other) are most closely identified. In the case of a scientist employed in a general category such as science education he should be reported in the field most closely related to the academic requirements of his position — such as mathematics, sociology, or psychology.

It is recognized that because of the importance of academic departments in the organizational structure and, thus, in the information system of institutions of higher education, many institutions must report individuals in terms of the departmental assignment shown in the personnel information system. In some instances, the designated department will not necessarily be the same as the field in which an individual is actually employed.

**ENGINEERING**

Aeronautical and astronautical: aerodynamics, aerospace, space technology
Chemical: ceramic, petroleum, petroleum refining, process
Civil: architectural, hydraulic, hydrologic, marine, sanitary and environmental, structural, transportation
Electrical: communication, electronic, power
Mechanical: engineering mechanics
Other engineering: agricultural, industrial and management, metallurgical and materials, mining, nuclear, ocean engineering systems, textile, welding

**PHYSICAL SCIENCES**

Chemistry: analytical, inorganic, organo-metallic, organic, pharmaceutical, physical, polymer science (exclude biochemistry)
Physics: acoustics, atomic and molecular, condensed matter, elementary particles, nuclear structure, optics, plasma
Other physical sciences: astronomy (laboratory astrophysics, optical astronomy, radio astronomy, theoretical astrophysics, X-ray, gamma-ray, neutrino astronomy), metallurgy

**ENVIRONMENTAL SCIENCES** (terrestrial and extraterrestrial)

Earth sciences: engineering geophysics, general geology, geodesy and gravity, geomagnetism, hydrology, inorganic geochemistry, isotopic geochemistry, organic geochemistry, lab geophysics, paleomagnetism, paleontology, physical geography and cartography, seismology, soil sciences
Atmospheric sciences: aeronomy, solar, weather modification, extraterrestrial atmospheres, meteorology
Oceanography: biological oceanography, chemical oceanography, geological oceanography, physical oceanography, marine geophysics

**MATHEMATICAL SCIENCES:**

Mathematics: algebra, analysis, applied mathematics, foundations and logic, geometry, numerical analysis, statistics, topology
Computer science: computer programming;[1] computer and information sciences (general); design, development, and application of computer capabilities to data storage and manipulation; information sciences and systems; systems analysis

**LIFE SCIENCES**

Agricultural sciences: agronomy, animal science, dairy science, food science and technology, forestry, horticulture, poultry science
Biological sciences: anatomy, bacteriology, biochemistry, biogeography, biophysics, ecology, embryology, entomology, evolutionary biology, genetics, immunology, microbiology, nutrition and metabolism, parasitology, pathology, pharmacology, physical anthropology, physiology, plant sciences, radiobiology, systematics
Medical sciences: Internal medicine, neurology, ophthalmology, preventive medicine and public health, psychiatry, radiology, surgery, veterinary medicine, dentistry, physical medicine and rehabilitation, pharmacy, podiatry

**PSYCHOLOGY:** animal behavior; clinical psychology; comparative psychology, counseling and guidance; development and personality; educational, personnel, vocational psychology and testing; experimental psychology; ethology; industrial and engineering psychology; social psychology

**SOCIAL SCIENCES**

Economics: agricultural economics; econometrics and economic statistics; history of economic thought; international economics; industrial, labor and agricultural economics; macroeconomics; microeconomics; public finance and fiscal policy; theory; economic systems and development
Sociology: comparative and historical, complex organizations, culture and social structure, demography, group interactions, social problems and social welfare, sociological theory
Political science: area or regional studies, comparative government, history of political ideas, international relations and law, national, political and legal systems, political theory, public administration
History
Other social sciences: cultural anthropology, linguistics, socioeconomic geography, and research in education

[1] Personnel employed as computer programmers should be reported as technicians (item 8).

## Section A—Number of Scientists and Engineers, January 1975

(Includes postdoctorals, excludes graduate students)

(Note: Figures on graduate students engaged part time as scientists and engineers should be reported in Section B)

This section requests data on full-time and part-time employed scientists and engineers. Scientists and engineers include faculty members, postdoctorals, and other professionals (at a level at which the knowledge acquired by academic training equal to a bachelor's degree is essential in the performance of duties) working in the sciences and engineering at your institution, including those in research administration.

Two of the most common methods used to determine whether an individual is employed full time are: (1) working 40 hours per week; (2) teaching 12 credit hours per week. (The preceding serve as illustrations only; the "full-time" workload may vary somewhat from institution to institution.)

**Item 1. Full-time scientists and engineers,** by field and function in which *primarily* employed, January 1975.

In items 1a to 1h, the functional classification of professional personnel into teaching (column 2), R&D (column 3), and other science and engineering activities (column 4), should be based on the function in which the person is primarily engaged or employed at the institution. For example, a person engaged in two or all three of the specified functional categories should be classified in the function in which he spends the largest proportion of his time. Exclude outside consulting work and teaching not performed under the auspices of your institution.

In classifying personnel by function, note that determinations made solely on the basis of job titles may produce a significant bias, primarily toward teaching. Persons with professorial rank may also be engaged in research. Among the factors that may be considered in determining the primary function of an individual are both his "separately budgeted" R&D assignment and his estimated departmental research workload.

In classifying an individual under a particular category (teaching, research and development, or other science and engineering activities), take into consideration all official activities even if carried on in a school or department other than the one in which he holds his principal appointment.

*Teaching* (column 2) is defined as encompassing those activities connected with degree-credit courses or which are intended to lead ultimately to the granting of degrees or certificates or to professional certification or licensing. Included are such functions as instruction and training performed in connection with degree-credit courses and the administration of such instruction and training.

Include under "teaching" any academic administrator such as the President, a Dean, a Department Chairman, who holds a science or engineering degree, unless the individual is primarily involved in the administration of R&D activities. If the individual cannot be identified with one specific discipline, report the field of his highest earned degree. Administrators primarily involved in R&D activities should be reported in the "R&D" column.

Include instruction of interns, residents, and other professional personnel receiving advanced training such as postdoctoral fellows or trainees.

Time spent by faculty or other staff members in supervising the thesis work of graduate students is considered to be part of the teaching function.

Exclude instructors in nursing, dental hygiene, etc.

*Research and development* (column 3) include basic and applied research in the sciences and in engineering, and design and development of prototypes and processes.

Research is a systematic, intensive study directed toward fuller knowledge of the subject studied. Included in this function is the preparation for publication of books and papers describing the results of the specific research and development, if carried out as an integral part of that research and development. Also included is the administration of research and development.



Development is the systematic use of knowledge directed toward the design and production of useful prototypes, materials, devices, systems, methods, or processes. It does not include quality control or routine product testing.

Under *other science and engineering activities* (column 4) report all professional personnel not primarily employed in teaching or research and development, as defined above. Examples of such activities are agricultural demonstration work; adult education (if not degree credit); dissemination of scientific information; student counseling by individuals with a degree in psychology. Exclude hospital employees predominantly involved in patient services, Student Health Service professionals, and other individuals that are not primarily engaged in science or engineering activities. Do not use this category to report individuals for which there is difficulty in determining their primary function. It is preferable that you classify each person in the most appropriate functional category according to your best estimate.

*Full-time equivalent distribution, by function.* In line 1i, apportion staff members across the three functions on the basis of the proportion of effort or time spent in each of the functions, thus correcting for the "primarily engaged" head-count data reported in line 1h. For example, an individual devoting three-fourths time to teaching and one-fourth to research and development should be counted as 0.75 in teaching and 0.25 in research and development. The FTE values should be cumulated for each function. This sum should then be rounded *to the nearest whole number* before entering the number on the questionnaire. In item 1i, figures entered in columns (2), (3), and (4) should add to the total in column (1).

**Item 2. Full-time scientists and engineers,** by highest earned degree and function in which *primarily* employed, January 1975.

For the purposes of this survey, earned degrees are classified in four categories as defined below:

a. "Ph.D. or Sc.D." degrees include all such earned degrees. Include individuals holding both the Ph.D. (or Sc.D.) degree and a first-professional degree, such as the M.D. Exclude persons who hold an Ed.D. or J.D. degree.

b. "M.D., D.D.S., D.V.M., etc." includes individuals whose highest earned degrees are first-professional medical degrees that indicate the completion of the academic requirements based on programs that require at least two academic years of previous college work for entrance and require a total of at least six academic years of college work for completion. Specifically, include in line 2b first-professional degrees in medicine (M.D.), Dentistry (D.D.S. or D.M.D.), Veterinary Medicine (D.V.M.), Chiropody or Podiatry (D.S.C. or D.P.), Optometry (O.D.), and Osteopathy (D.O.). Individuals holding both the Ph.D. (Sc.D.) degree and a first-professional degree, such as the M.D., should be included in line 2a as mentioned in (a) above.

c. "Master's" degrees include all degrees above the bachelor's and first-professional degree and other than the Ph.D., Sc.D., M.D., D.D.S., and other degrees reported in lines 2a and 2b. Include persons who hold an Ed.D. or J.D. degree.

d. "Bachelor's or the equivalent" include all individuals whose highest earned degree is the bachelor's degree or a four- or five-year first-professional degree, or who have the equivalent in experience, even if they have not earned such a degree (line 2d).

**Item 3. Part-time scientists and engineers,** by field and function in which *primarily* employed, January 1975.

Instructions for item 1a-1h relating to classification by field and function also relate to part-time professional staff in item 3.

In estimating the full-time equivalents of part-time personnel in item 3i,[2] take into account both the overall workload and the proportion of time spent on each of the three functions of activity. For example, if the full-time workload were 40 hours per week, and an individual were estimated to spend 10 hours on teaching and related duties and 6 hours on research, his FTE values would be: Teaching — .25 (10/40); R&D — .15 (6/40). The FTE values should be cumulated for each function and *rounded to the nearest whole number* before entering the number on the questionnaire. The FTE values entered in columns (2), (3), and (4) should then be summed to arrive at the total to be entered in column (1).

[2] These instructions also apply to the reporting of FTE values of graduate students engaged part time as scientists and engineers (item 7i).

**Item 4. Part-time scientists and engineers**, by highest earned degree and function in which primarily employed, January 1975.

Instructions for item 2 relating to the classification by field and highest earned degree also relate to part-time professional staff in item 4.

**Item 5. Scientists and engineers with doctorate degrees**, by field in which primarily employed, January 1975.

Include only Ph.D.'s and Sc.D.'s reported in items 2a and 4a. Exclude Ed.D., J.D., M.D., D.D.S. degrees, etc. The total number in item 5h, column 2 should equal the number shown in item 2a, column 1; the total number in item 5h, column 3 should equal the number shown in item 4a, column 1.

**Item 6. Full-time scientists and engineers**, by field in which primarily employed and sex, January 1975.

Institutions are requested to report total full-time scientists and engineers, by sex and field in which primarily employed. Data in column 1 (total of men and women) should equal data shown in item 1, column 1.

## Section B—Number of Graduate Students Engaged Part Time as Scientists and Engineers

**Item 7. Graduate students** receiving compensation for part-time services as scientists and engineers at your institution, by field and function in which primarily engaged, January 1975.

*Include* all graduate students who are enrolled in a course of study designed to lead to an advanced degree in the sciences or engineering and *who also receive compensation* from your institution for part-time professional services performed in the sciences or engineering. This category includes (a) graduate students receiving salaries or wages for their services as teaching assistants or research assistants, teaching associates, research associates, and (b) graduate students receiving other financial aid that requires the performance of professional services in the sciences or engineering at your institution. Exclude graduate students receiving nonduty stipends and others who may be engaged in scientific and engineering activities on a voluntary basis.

Instructions for item 1a-1h regarding classification by field and function may be used in classifying graduate students in item 7a-7h.

Instructions for item 3i, relating to full-time equivalents (FTE) of part-time professional staff, by function, also relate to graduate students in item 7i.

## Section C—Number of Technicians Employed in the Sciences and Engineering

**Item 8. Technicians**, by field and function in which primarily employed, January 1975.

Technicians *include* all persons employed in positions which involve technical work at a level requiring knowledge in any of the fields of engineering, mathematics, physical sciences, environmental sciences, life sciences, psychology, or social sciences comparable to that acquired through formal post-high school training (less than a bachelor's degree), such as that obtained at technical institutes and junior colleges or through equivalent on-the-job training or experience. All personnel performing the duties described above should be reported as technicians even if they hold a bachelor's or higher degree. Some typical job titles include laboratory technician or assistant, physical science aide, engineering aide, statistical aide, draftsman, and computer programmer.

*Do not include* graduate students who were reported in item 6. Also *exclude* craftsmen such as electricians, carpenters, machinists, etc. In the case where undergraduate students, juniors or seniors, are employed in R&D activities, they may, where applicable, be included as technicians.